

A Comparative Study of Life Skill Development of Vocational and Non-Vocational Higher Secondary School Students¹

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Abstract

The study's goal was to gauge the level of technical expertise students at Madhya Pradesh Vocational Higher Secondary Schools had attained in the two years following their tenth-grade year. VHS skill courses are designed to teach students the information, skills, and attitudes necessary to succeed in their chosen field of study. Students will also learn how to be successful business owners. This article focuses on CSIT, a course from Vocational Higher Secondary Education's Skill-based courses collection. Students from 12 Vocational Higher Secondary Schools were randomly chosen from 94 state syllabus schools where the CSIT course was available. The data was gathered using a structured survey. The computer labs at all the schools examined were determined to be adequately stocked. With a laptop, a projector and high-speed internet connection in most of the classes, it was easy for students to stay connected. For 24 days a year, students were required to attend On-the-Job Training at well-known organisations. Students were asked to rate their progress on a scale of one to ten as they learned new abilities throughout the course of the study. VHS Schools Skill Courses were found to be an excellent fit for the kids, and the pupils exhibited strong comprehension and a realistic reaction to most of the skills they were taught. Many students benefited from the CSIT Course's hardware, software, and other skills.

Keywords: *Computer Science & Information Technology; CSIT; Skill Acquisition; Vocational Skills; Skill Courses; Life Skills.*

1. Introduction

From upper elementary through university, the field of Vocational Education and Training encompasses all forms of official and informal education and training. To prepare students for a career or a collection of careers at the upper secondary level, this education focuses on developing skills, knowledge, and attitudes. To be a strong weapon for social, economic, and cultural change, education must be tied to people's daily lives, needs, and wants. Vocationalist is a term coined by Kazim Bacchus (1998) to describe "efforts of schools to include in their curriculum those practical subjects that are likely to generate some basic knowledge, skills and arrangements among the students that might prepare them to think about becoming skilled workers or taking on other manual jobs." There are many people in the education policy community who feel that vocational training might help kids become more employable at an earlier age. There are some things to consider while learning new talents, and each contributes to a person's success in the professional arena. No school reform, according to the Education Commission, is more critical or more urgent than a shift toward a more life-centred approach that uses education as a strong tool for

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social, economic, and cultural change to help us accomplish our national goals. This may be done if the curriculum is focused on boosting productivity. Vocational training may help students learn new skills. Any kind of education that aims to prepare students for a job in a certain profession is considered vocational education. Because of this, the individual is better prepared to lead a more successful life. Olaitan and Aguisiobo (1981) emphasised the idea that all skill-oriented programmes require extensive hands-on experience to be successful. Nobody can gain the information and skills necessary to generate practical ideas and products without the training of trained employees, who are the only ones capable of doing so.

2. Literature Review

Maria Esther Oswald-Egg ET. Al, (2021): The job market is easier for college graduates with work experience. VET work experience is examined in this research to see whether it has an impact on one's job prospects following graduation from college. We utilise the regional enrollment rate for upper-secondary VET as a tool to account for selection into VET. After graduating from college, VET students earn 7 to 19 per cent more money and spend two months less time searching for their first job, according to findings from a study published in the Journal of Vocational Education and Training (JVET). Only a few years later does the impact begin to wear off; earnings, unemployment, and job status are no longer statistically significant. Human capital (specific and general), screening and signalling channels, not social network channels, are responsible for the impact. Upper-secondary vocational education and training (VET) seems to be a viable alternative to a traditional university degree for those who are serious about continuing their education after high school.

Khusaini ET. Al(2021): Students' lack of financial education and awareness has an influence on their challenges in managing and making decisions about their finances; they tend to be more impulsive. Financial literacy among high school students in Tangerang, Indonesia, was the focus of this research, which looked at the disparities in financial literacy between students in senior high school and those in vocational high schools. Comparative research was used in the study's design. A total of 371 randomly selected samples were used in this study. Validity and reliability of the research instrument had been established. Crosstab, independent samples t-test, and ANOVA analysis were utilised by the authors. Students scored in the middle of the range when it came to financial literacy, according to the findings. Students' financial literacy was shown to be significantly correlated with their senior high school and vocational school education, but not with their gender, their parents' education, or their family's income. There was no significant difference in the degree of financial literacy between students in senior high school and vocational high school, as well as gender characteristics, education, or parental income, according to the results of several tests. Financial literacy is becoming more important for pupils' future success in school, thanks in part to the findings of this research.

Pujun Chen ET. Al, (2021): Global collaboration and mutual learning in Vocational Education and Training (VET) is increasing the relevance of international comparative research on this topic. Despite this complexity, the VET sector and worldwide comparisons provide a unique opportunity and challenge for research. In addition, cross-border partnerships are increasingly being used to do comparative research, which has its own set of organizational and methodological issues, possibilities, and obstacles. As an example of collaborative research, this study looks at how the competence-based approach has been implemented in Russian and Chinese VET. To illustrate how an international team of researchers worked together to design an instrument for curricular comparison, this paper discusses and analyses methodological and organisational characteristics and problems.

Anu Thomas & Rachna Agarwal (2020): It was the goal of this research to evaluate the vocational skills that Madhya Pradesh Vocational Higher Secondary School students had learned throughout their two years of education following 10th grade. Vocational High School courses are designed to provide students with the information, abilities, and attitudes they need to succeed in the workplace in the field in which they are studying. Students will

also learn how to start and run their own profitable businesses. This research examined a CSIT (Computer Science and Information Technology) course from VHSE's skill-based curriculum. Students from 12 Vocational Higher Secondary Schools were randomly chosen from 94 state syllabus schools where the CSIT Course was taught. The data was gathered using a standardized form. There were enough computers in each school's lab to meet the needs of the students. With a laptop, projector and high-speed internet connection in most of the classes, it was easy for students to stay connected. During their time in school, students received 12 hours of practical instruction each week, as well as 24 days of training at reputable companies. Students used a 10-point scale to rate their progress in mastering the material they learned. According to the results of the research, students were happy with the course and learned new skills by taking VHS Schools Skill Courses. Students demonstrated strong comprehension and realistic responses to the abilities they learned. Most students benefited from the CSIT Course's hardware, software, and other skills, which included both.

Jisha K V (2016): Over the course of one's life, one acquires life skills. Childhood's two most vital jobs are growth and development. Height, weight, and the emergence of age-related changes in the body are all physical manifestations of growth. This kind of development is far more difficult and entails learning the traits and activities that help one grow into an adult who has strong self-esteem, is socially integrated, confronts changes, challenges, and responds to disputes and stress. Developing one's life skills is critical to one's well-being. It aids pupils in a variety of ways, including decision-making, problem-solving, critical thinking, effective communication, interpersonal empathy, and general life management. Life skills were compared between vocational and non-vocational high schools in Madhya Pradesh in this research. Both the percentage analysis and the significance test for the difference between means are employed in this study's data analysis. According to the researcher, the living skills of vocational high school pupils are more advanced than those of their non-vocational counterparts.

3. Methodology

The CSIT course is one of the Skill-based courses offered by Vocational Higher Secondary Education (VHSE) in this subject. Three hundred and eighty-nine vocational high schools in Madhya Pradesh provide a total of 35 training programmes. CSIT courses may be taken at 94 different institutions. A total of 2500 students from 94 Vocational Higher Secondary Schools take the CSIT course each year from the 100 CSIT batches. The survey was conducted in accordance with a research design. The research was carried out in Madhya Pradesh at 12 Higher Secondary Vocational Schools. More than 263 CSIT students from these 12 schools were surveyed. Students rate themselves on a scale of 1 to 10 on how well they think they've prepared for their modular course. Students were given four hours of study and twelve hours of practice each week. On-the-job training was also given to them for a total of 24 days. For this research, students of Computer Science & Information Technology at Madhya Pradesh Vocational Higher Secondary Schools would be assessed on 18 competencies. All the students were handed the questionnaire, and they were asked to rate their performance on a scale of 1 to 10 for each ability. Practical training at Madhya Pradesh State Vocational Higher Secondary School must be evaluated since students' ability to acquire new skills is directly correlated to the quality of the training they get.

4. Analysis

Skills 2 (8.13), 4 (7.56), 5 (7.68), and 6 (8.54), which the students scored highly in, are shown in Table 1. The standard deviation also shows that most pupils are closer to 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

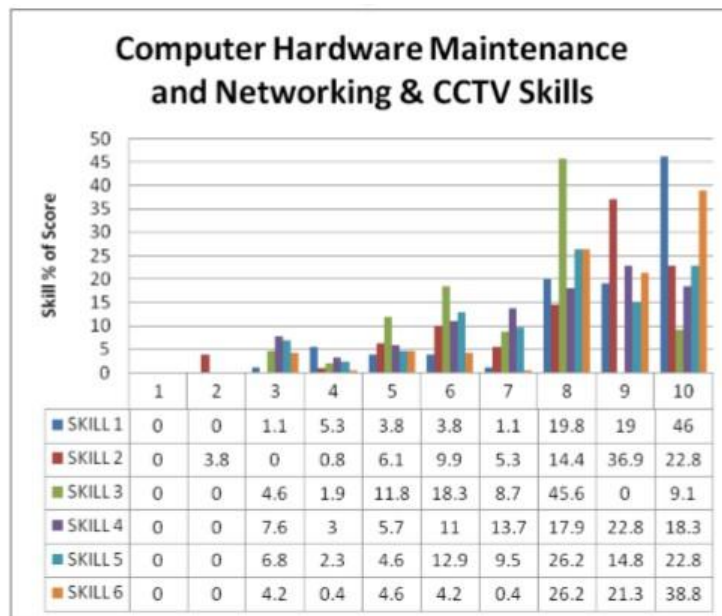


Figure-1

About 45.3% of students received a score between 3 and 7, 45.6% received an 8-point score, and only a tiny proportion of 9.1% received a 10-point score for Skill 3-Operating System Installation Skill (Figure 1). A greater emphasis should be placed on the development of this specific ability by vocational educators. For the remaining abilities, many of the students' clustered results are in the range of 8 to 9. Analysing the practical test's standardised results reveals that the pupils did well.

Table 2 reveals that students have gained skills via on-the-job training and practical instruction at school, as well as at external training institutions. Overall, the mean score of 8.34 is the greatest for Skill 11 (Photo Editing with Adobe Photoshop), while the mean score of 6.95 is the lowest for Skill 9 (Spreadsheets Creation Skill with Excel/Calc). Other talents, such as Skill 7 (7.18), Skill 8 (7.59), Skill 10 (7.52), and Skill 12 (78.98) show that the

pupils earned a high skill rating. It is also obvious from looking at standard deviations that the majority of pupils are not too far from the mean.

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

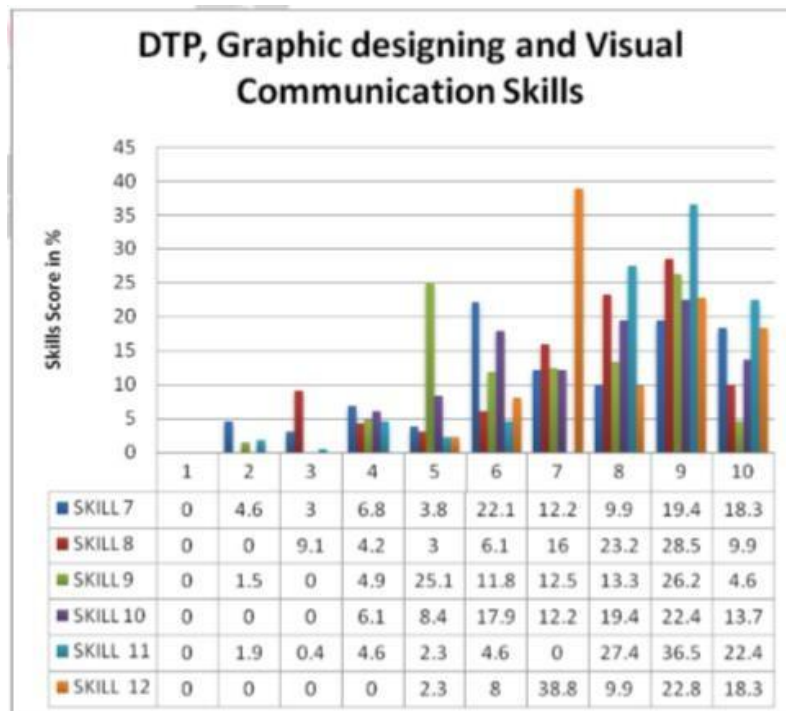


Figure-2

Figure 2 shows that among the Module 2 Skills, Skill-9 (the ability to create spreadsheets in Excel/Calc) is the least developed. Only 4.6% of students gave a 10-point score, indicating that they had exceptional knowledge. Also, only 9.9% of students gave Skill-8- Professional documents creation using Word/Writer a 10-point score. As a

result, teachers/instructors must devote more time and effort to educating pupils in the skills of Skill-8 and Skill-9. Scores between six and nine points were clustered together, indicating that the students had learned new abilities. 83.3% of students rated their ability to use CorelDraw's graphics design features at an 8 or 10 on the Skill-11 scale, indicating that their performance was above average.

A mean score of 7.81 for Skill 13 (Computer programming skill with C++) is the greatest, while a mean score of 7.71 for Skill 14 (Database Design skill with SQL) is the lowest, as shown in Table 3. Most students have a smaller standard deviation, as can be seen by looking at the 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

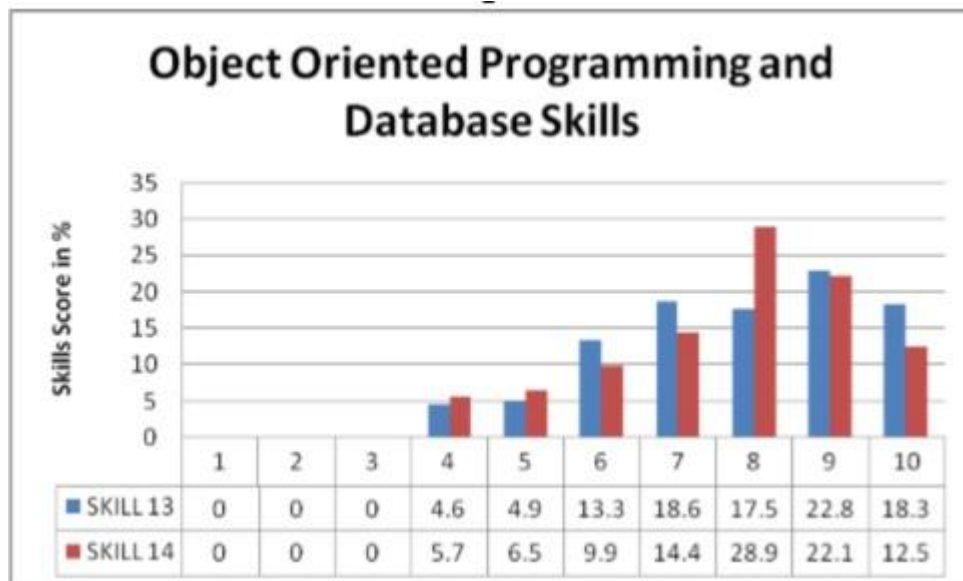


Figure-3

Since no one's score falls below 4, it's clear that each student has mastered C++ programming and SQL database architecture. They can construct basic C++ programmes, set up databases, and then perform SQL queries to obtain data from these databases. C++ programming had a student rating of 77.2 per cent, while Database Designing with SQL had a student rating of 70.9 per cent, indicating that students have a solid foundation in programming and databases, respectively.

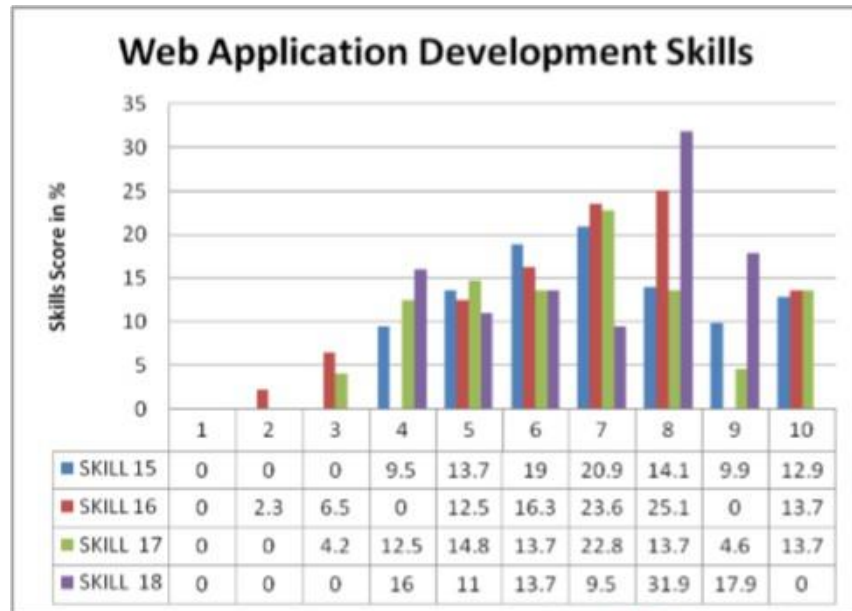


Figure 4

Skill 18-Web Hosting is a skill that none of the students claims they are comfortable with; further training is required to help them build their confidence. Compared to other previously taught skills, students' self-grade rankings for Skill 15-(Web Development using HTML), Skill 16-(Web Development using JavaScript), Skill 17-(Web Development using PHP) and Skill 18-(Web Hosting Skill) were all in the 7-10- point range. As a result, pupils should get greater attention while learning Web Development.

5. Conclusion

The following conclusions may be derived from the study's findings: Many vocational high schools have the necessary computer and laboratory equipment to instruct their pupils in accordance with established guidelines. During the session, two or three students usually use the same computer. Consequently, students are unable to practice on their own during lab time. Both classroom instruction and hands-on experience gained on the job make up the bulk of vocational high schools' instructional offerings. VHS School, Skill development Courses were the primary source of practical knowledge for the vast majority of the pupils. In addition, most of the skills taught were beneficial to students' growth and future. A workforce that is "job ready" upon graduation from high school may be created via VHSS and Skill courses.

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