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Students' Perceptions on Vocational Education Programme

Dr. K. Parthasarathy¹

Chair - School of Skill Development and Entrepreneurship
Professor and Director,
Institute for Entrepreneurship and Career Development
Bharathidasan University, Khajamalai Campus,
Tiruchirappalli - 620023 – India

Dr. P. M. Aswini²

Managing Trustee,
PASS Foundation,
Madipakkam, Chennai-600091 – India

M. Monika³

Research Scholar,
Department of Management Studies,
Urumu Dhanalakshmi College,
Kattur, Tiruchirappalli - 620019 – India

Abstract: *Students are interested to learn different aspects in different way. Therefore they have to be properly learned to enhance their competencies. Effectiveness and importance of computer vocational education programme is to raise and improve student's skills and knowledge. The purpose of this paper is to assess students' perceptions on vocational education in computer programme. This paper has reviewed the vocational education among students by taking into consideration the computer skill in Programming Techniques of the students through systematic review of existing literature review. The study has also developed a framework and set of proposition that represents the vocational education programme among students to develop the computer skills.*

Keywords: *Perceptions, Vocational Education, Computer Programme.*

I. INTRODUCTION

Vocational Skill Development Programme (VSDP) has a distinct role in the achievement of the future of the students. Because, it increases both the skills and competency and skills of the students. Vocational skill development programme has the return on an investment. In order to improve the computer skills and knowledge of the students, computer programmes are designed and offered by the institutions. The knowledge of the students also depends on other factor like, teaching method. The purpose of this study is to show that perception of the students on vocational skill development programme in computer education. Programme is the process of learning experience which involves imparting knowledge, skills and abilities to students in order to bring about a permanent change of those qualities in them. A good programme at appropriate time enhances the technical skills of the students. Vocational skill development programme also enhances learning new things and improves skills of the students. But VSDP is focused on individuals' skill development and enhancing those skills and abilities to perform their tasks immediately.

II. REVIEW OF LITERATURE

Parthasarathy K, et.al., (2017), reported that, the skill development training programme is of practical and theoretical knowledge of the specific subject can be conveyed effectively to students by applying suitable skills, methods, techniques and creating favorable atmosphere. This study shows that the skill development programme given to computer science trainers did make any difference in students learning during transacting curriculum. The association difference in respondent's achievement on overall programme, practical and theory of computer education as compared to biographical information. It could be

concluded that the trained teaches utilized the training input. Such programme for students is essential to bring desirable in students learning.

Jayalakshmi S, et.al., (2017), reported that, the training programme gives more practical knowledge to the teachers. Give the training to improve HOT values (High Order Thinking) among the school children's through training for school teachers. To motivate the teachers to set induction to their students about computer science programme before starting the particular chapter. In future the pre phase, post phase training and ongoing programme training will be helpful for the teachers to clarify their doubts immediately and also updated their students accordingly. The training programme is always for the teachers to increase their abilities and enhance their knowledge in a better level. Through this training the students also getting trained very well with computation skills in the early stage.

Shanmugapriya K et. al., (2016), found that influence between the monthly income and feedback of the computer teachers who had attended the skill development programme. Most of the teachers hold the same opinion, their scenes to be no influence of their monthly income on the feedback of the skill development training programme in the field of computer science. Overall the study found that there are significant variance between the monthly income of the respondents and their impact on the skill development training programme of computer science as, participation and interactions with trainers & fellow participants, training experience gained is useful in computer science field, the training venue, lab and facilities were adequate and comfortable, and training was very useful in all practical purpose. It is suggested that periodical skill development training programmes to the stakeholders in the field of computer science is very essential and it should be well planned and expected for the overall betterment of the trainees in computer science field.

Noorbahani & Kardan., (2011), examined that Computer-Assisted Assessment systems and assessment strategies are based on the survival of a correct answer for each question to be used as a reference answer in the assessment of student's answers. The relationship between the reference answer and the student's answers is determined using traditional information retrieval techniques based on co-occurrence of conditions. Such methods are regularly effective when dealing with long texts, because similar long texts usually contain a high degree of co-occurring terms. However, in short free-text answers, word co-occurrence may be rare or even unacceptable, and yet have similar meanings. Also, the use of only one reference answer can be very disciplining because of the multiplicity of possible correct different answers to a question.

III. RESEARCH METHODOLOGY

The researchers used survey method with a structured questionnaire. Data was collected from 196 school students, who are undergoing the computer programme, especially certificate in programming techniques under the School-University-Industry-Tie-up Schemes (SUITS) operated by Bharathidasan University in TamilNadu & Puducherry. The school students provided answers to the structured questionnaire in the form of 'yes' or 'no' to express their attitude towards the SUITS Programme. Bharathidasan University's IECD conducted the computer science related programmes to the school students through SUITS. It empowers and imparts confidence in the minds of the school students. Totally 8 computer certificated programmes are being conducted for students from 5th and above standard. A total of 16,381 students were studying and 205 schools enrolled Certificate in Programing Techniques (CPT) in the academic year 2016-17. The researchers collected only one individual from the each school. The present study aimed at evaluating the student's perceptions about the certificate in programming techniques programme. Stratified random sampling method has been used in this survey.

IV. GENERAL FINDING OF THE STUDY

Table 1: Showing the Frequency Distribution of the Student's age

Variables		Frequency	Percent
Age	11 years	37	19
	12 years	120	61.2

	13 years	31	15.8
	14 years and above	8	4
Total		196	100

The table 1 shows that, majority of the students (61.2 percent) of the present study are in the age 12 years, 19% of the students are in the age of 11 years, 15.8% of the students are in the age of 13 years and only 4% of the students are in the age of 14 years and above.

Table 2: Distributions of the students according to their perception of career development

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
SUITS - Computer programme is a good foundation for future career	194	2	99%	1%
Total	196		100%	

The Table 2 states that 99% of the students are said that 'YES', 1% of the students are said that 'NO' with regarding to the perception on "SUITS - Computer programme is a good foundation for future career".

Table 3: Distributions of the students according to their perception of "SUITS book easy to read"

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
SUITS book easy to read	175	21	89.3%	10.7%
Total	196		100%	

The Table 3 states that 89.3% of the students are said that 'YES', 10.7% of the students are said that 'NO' with regarding to the perception on "SUITS book easy to read".

Table 4: Distributions of the students according to their perception of "like this computer programme"

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Do you like this computer programme	195	1	99.5%	.5%
Total	196		100%	

The Table 4 states that 99.5% of the students are said that 'YES', 0.5% of the students are said that 'NO' with regarding to the perception on "Like this computer programme".

Table 5: Distributions of the students according to their perception of "Computer teacher allows to work in computer during computer periods"

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Computer teacher allows to work in computer during computer periods	176	20	89.8%	10.2%
Total	196		100%	

The Table 5 states that 89.8% of the students are said that 'YES', 10.2% of the students are said that 'NO' with regarding to the perception on "Computer teacher allows to work in computer during computer periods".

Table 6: Distributions of the students according to their perception of “Received the SUITS book on time”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Received the SUITS book on time	188	8	95.9%	4.1%
Total	196		100%	

The Table 6 states that 95.9% of the students are said that ‘YES’, 4.1% of the students are said that ‘NO’ with regarding to the perception on “Received the SUITS book on time”.

Table 7: Distributions of the students according to their perception of “Teacher have clearly taught the computer science subject”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Teacher have clearly taught the computer science subject	194	2	99%	1%
Total	196		100%	

The Table 7 states that 99% of the students are said that ‘YES’, 1% of the students are said that ‘NO’ with regarding to the perception on “Teacher have clearly taught the computer science subject”.

Table 8: Distributions of the students according to their perception of “Teachers were interested in personal academic development”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Teachers were interested in personal academic development	186	10	94.9%	5.1%
Total	196		100%	

The Table 8 states that 94.9% of the students are said that ‘YES’, 5.1% of the students are said that ‘NO’ with regarding to the perception on “Teachers were interested in personal academic development”.

Table 9: Distributions of the students according to their perception of “Resources for practical’s and examinations are adequate”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Resources for practical’s and examinations are adequate	179	17	91.3%	8.7%
Total	196		100%	

The Table 9 states that 91.3% of the students are said that ‘YES’, 8.7% of the students are said that ‘NO’ with regarding to the perception on “Resources for practical’s and examinations are adequate”.

Table 10: Distributions of the students according to their perception of “SUITS programme are conducted by teachers regularly”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
SUITS programme are conducted by teachers regularly	181	15	92.3%	7.7%
Total	196		100%	

The Table 10 states that 92.3% of the students are said that ‘YES’, 7.7% of the students are said that ‘NO’ with regarding to the perception on “SUITS programme are conducted by teachers regularly”.

Table 11: Distributions of the students according to their perception of “Teachers using SUITS book while handling classes”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Teachers using SUITS book while handling classes	191	5	97.4%	2.6%
Total	196		100%	

The Table 11 states that 97.4% of the students are said that ‘YES’, 2.6% of the students are said that ‘NO’ with regarding to the perception on “Teachers using SUITS book while handling classes”.

Table 12: Distributions of the students according to their perception of “Syllabus easy to understand”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Syllabus easy to understand	174	22	88.8%	11.2%
Total	196		100%	

The Table 12 states that 88.8% of the students are said that ‘YES’, 11.2% of the students are said that ‘NO’ with regarding to the perception on “Syllabus easy to understand”.

Table 13: Distributions of the students according to their perception of “Like the university computer examination through OMR sheet”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Like the university computer examination through OMR sheet	184	12	93.9%	6.1%
Total	196		100%	

The Table 13 states that 93.9% of the students are said that ‘YES’, 6.1% of the students are said that ‘NO’ with regarding to the perception on “Like the university computer examination through OMR sheet”.

Table 14: Distributions of the students according to their perception of “Syllabus is quite heavy”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Syllabus is quite heavy	55	141	28.1%	71.9%
Total	196		100%	

The Table 14 states that 28.1% of the students are said that ‘YES’, 71.9% of the students are said that ‘NO’ with regarding to the perception on “Syllabus is quite heavy”.

Table 15: Distributions of the students according to their perception of “School is provided adequate time for practical aspects”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
School is provided adequate time for practical aspects	183	13	93%	7%
Total	196		100%	

The Table 15 states that 93% of the students are said that ‘YES’, 7% of the students are said that ‘NO’ with regarding to the perception on “School is provided adequate time for practical aspects”.

Table 16: Distributions of the students according to their perception of “Computer programmes to providing knowledge and skills for academic growth”

Statements	Total No. of Students		Percentage to Total	
	Yes	No	Yes	No
Computer programmes are for providing knowledge and skills for academic growth	193	3	98.5%	1.5%
Total	196		100%	

The Table 16 states that 98.5% of the students are said that ‘YES’, 1.5% of the students are said that ‘NO’ with regarding to the perception on “Computer programmes are for providing knowledge and skills for academic growth”.

Descriptive Analysis and Findings of the Study

Table 17: Descriptive Statistics Showing the Highest Mean Score among the Students Perceptions of Skill Development

Descriptive Statistics					
S.No	Statements	N	Mean	Rank	Std. Deviation
S1	SUITS - Computer programme is a good foundation for future career	196	1.99	1	.101
S2	SUITS book easy to read	196	1.89	13	.310
S3	Do you like this computer programme	196	1.99	1	.071
S4	Computer teacher allows to work in computer during computer periods	196	1.90	12	.303
S5	Received the SUITS book on time	196	1.96	6	.198
S6	Teacher have clearly taught the computer science subject	196	1.99	1	.101
S7	Teachers were interested in personal academic development	196	1.95	7	.221
S8	Resources for practical’s and examinations are adequate	196	1.91	11	.282
S9	SUITS programme are conducted by teachers regularly	196	1.92	10	.267
S10	Teachers using SUITS book while handling classes	196	1.97	5	.158
S11	Syllabus easy to understand	196	1.89	13	.316
S12	Like the university computer examination through OMR sheet	196	1.94	8	.240
S13	Syllabus is quite heavy	196	1.28	15	.450
S14	School is provided adequate time for practical aspects	196	1.93	9	.249
S15	Computer programmes are for providing knowledge and skills for academic growth	196	1.98	4	.123

The above table 17 shows the Students perception on skill development programme in the field of computer science. Based on the individual statements mean value the 15 statements were ranked. The Rank 1 takes the highest mean value and Rank 15 takes the lowest Rank. The first rank is taken by three individual statements with mean value (1.99), the statements are SUITS - Computer programme is a good foundation for future career, like this computer programme and Teacher have clearly taught the computer science subject. Computer programmes are for providing knowledge and skills for academic growth ranked fourth with mean value (1.98). The fifth rank is taken by Teachers using SUITS book while handling classes with mean value (1.97).

Received the SUITS book on time takes the sixth rank with mean value (1.96). The 7th rank is taken by the statement with mean value (1.95) teachers were interested in personal academic development. The 8th rank is taken by Like the university computer examination through OMR sheet with mean value (1.94). School is provided adequate time for practical aspects have takes the 9th rank with mean value (1.93). SUITS programme are conducted by teachers regularly mean value (1.92) taken 10th rank respectively. Resources for practical's and examinations are adequate take the 11th rank with mean value (1.91). The 12th rank is taken by Computer teacher allows to work in computer during computer periods with mean value (1.90). SUITS book easy to read and Syllabus easy to understand both have takes the 13th rank with mean value (1.89). Finally, the statement is the Syllabus is quite heavy takes the 15th rank with mean value (1.28).

V. HYPOTHESIS AND FINDINGS

Hypothesis 1- There is no inter-relationship between student's perceptions on vocational skill development programme on programming techniques in the field of computer science.

Table 18: Correlation between student’s perceptions on Vocational Skill Development Programme

		Correlations														
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
Q1	Pearson Correlation	1														
	Sig. (2-tailed)															
	N	196														
Q2	Pearson Correlation	.293*	1													
	Sig. (2-tailed)	.000														
	N	196	196													
Q3	Pearson Correlation	.705*	.207**	1												
	Sig. (2-tailed)	.000	.004													
	N	196	196	196												
Q4	Pearson Correlation	-.034	.047	-.024	1											
	Sig. (2-tailed)	.634	.516	.737												
	N	196	196	196	196											
Q5	Pearson Correlation	-.021	.095	-.015	.016	1										
	Sig. (2-tailed)	.771	.184	.837	.828											
	N	196	196	196	196	196										
Q6	Pearson Correlation	-.010	-.035	-.007	.301**	-	1									
	Sig. (2-tailed)	.886	.625	.919	.000	.021										
	N	196	196	196	196	196	196									
Q7	Pearson Correlation	-.024	.070	-.017	.305**	-	.207**	1								
	Sig. (2-tailed)	.743	.332	.817	.000	.506	.004									
	N	196	196	196	196	196	196	196								
Q8	Pearson Correlation	.149*	.128	-.022	.375**	-	.329**	.258**	1							
	Sig. (2-tailed)	.037	.075	.759	.000	.376	.000	.000								
	N	196	196	196	196	196	196	196	196							
Q9	Pearson Correlation	-.029	.086	-.021	.030	.038	-	.195**	.116	1						
	Sig. (2-tailed)	.684	.228	.774	.679	.601	.684	.006	.106							
	N	196	196	196	196	196	196	196	196	196						
Q10	Pearson Correlation	-.016	.049	-.012	.052	.130	-	-.038	-.050	-.047	1					
	Sig. (2-tailed)	.819	.499	.872	.466	.069	.819	.602	.488	.517						
	N	196	196	196	196	196	196	196	196	196	196					
Q11	Pearson Correlation	.125	.452**	.201**	.254**	.008	.286**	.211**	.235**	.019	.045	1				
	Sig. (2-tailed)	.082	.000	.005	.000	.908	.000	.003	.001	.789	.531					
	N	196	196	196	196	196	196	196	196	196	196	196				
Q12	Pearson Correlation	-.026	.118	-.018	.265**	.055	-	-.059	.073	.007	-.041	.111	1			
	Sig. (2-tailed)	.718	.100	.799	.000	.445	.718	.410	.312	.928	.565	.120				
	N	196	196	196	196	196	196	196	196	196	196	196	196			
Q13	Pearson Correlation	-.050	-.224**	-.115**	.060	.014	-	.042	-.009*	.009	-.043	-.246	-.125	1		
	Sig. (2-tailed)	.490	.002	.110	.400	.845	.490	.563	.897	.901	.550	.001	.082			
	N	196	196	196	196	196	196	196	196	196	196	196	196	196		
Q14	Pearson Correlation	-.027*	.305	-.019**	.113	.049	-	.125	.064	.155	-.043	.165**	.103	-.107**	1**	
	Sig. (2-tailed)	.707	.000	.791	.114	.498	.707	.082	.376	.030	.548	.021	.151	.134		
	N	196	196	196	196	196	196	196	196	196	196	196	196	196	196	
Q15	Pearson Correlation	.401*	.091**	.574	.233	-.026	.814	.160	.257	-.036	-.020	.351**	-.032	-.107	-.033	1**
	Sig. (2-tailed)	.000	.204	.000	.001	.720	.000	.025	.000	.617	.779	.000	.658	.135	.644	
	N	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

From the data analysis presented in the table-18, the researchers have measured the relationship between 15 continuous dependent variables, which are the student’s perception on skill development programmes in the study area. The relationship between the variables is SUITS - Computer programme is a good foundation for future career, SUITS book easy to read, like this computer programme, Computer teacher allows to work in computer during computer periods, Received the SUITS book on time, Teacher have clearly taught the computer science subject, Teachers were interested in personal academic development, Resources for practical’s and examinations are adequate, SUITS programme are conducted by teachers regularly, Teachers using SUITS book while handling classes, Syllabus easy to understand, Like the university computer examination through

OMR sheet, Syllabus is quite heavy, School is provided adequate time for practical aspects and Computer programmes are for providing knowledge and skills for academic growth correlates positively with other variables and with itself shows the significance of the skill development programme provided by IECD, Bharathidasan University. Hence, the results concluded that, "There are significant inter-relationships among the perception of the students on the skill development in the study area".

VI. CONCLUSION

This study often lends itself to qualitative methods of inquiry. The questions asked in students' perceptions on vocational skill development programme are generally more open and lead to exploration of processes, both from the viewpoint of students, but also from that of SUITS staff and other stakeholders. The use of participatory evaluation is particularly relevant and appropriate in the present context. It is considered good evaluation practice to include both formative and **summative** evaluation. This study explored that the nearly 90 percent of the school students are very happy in learning the vocational skill development programme on computer science, especially programming techniques in more practical, systematic and scientific ways. A section of students are expressed that the syllabus of computer programming techniques should be modified and incorporated the recent developments in the field of computer programming.

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