



Accusation of Computation Skills Enhances Student Human Capital

Dr.K.Parthasarathy¹, P.M. Shanmuga Priya², J.Jeny Rani Mary³

¹Chair - School of Skill Development and Entrepreneurship, Professor & Director, Institute of Entrepreneurship and Career Development, Bharathidasan University, Khajamalai Campus, Tiruchirappalli, INDIA

²Assistant Professor, Department of Civil Engineering, B.S. Abdur Rahman Crescent University (Deemed), Vandalur, Chennai, INDIA

³E.Pudhur, Tiruchirappalli, INDIA

ABSTRACT

Student's human capital focus on the quality of the students which makes them a valuable asset. The specific human capital is usually gathered through education, training, working experience on knowledge which is specific to a firm or a task, to know the whether there is an investment on the student's human capital. Researcher used a researcher used descriptive study; to find out the investment on the students human capital data collected through scheduled questionnaire, spss were used for analysing the data. The results show that computer skill helps students to improve their own capital; hence by providing the opportunity for developing the human capital of the students, SUITS is implanting for the centuries.

Keywords-- Student's Human Capital, Accusation of Computation Skills

I. INTRODUCTION

Human capital is a theory which is disseminated by Gary Becker, an economist, university of Chicago, and Jacob Mincer that states to the stock of knowledge, habits, social and personality attributes, including creativity, embodied in the ability to perform labor so as to produce economic value. The student's human capital is the collective skills, knowledge or other intangible assets of students that can be used to create economic value for the students. Computer education is an investment in the human capital that pays off in terms of higher productivity.

Some economists attempted to measure the stock of human capital utilizing "school enrollment rates" as a proxy of human capital (Barro, 1991; Barro & Lee, 1993) However; the method includes a drawback that a student's effectiveness can be recognized after participating in production activities. Human Capital can be divided into two general human capital and Specific human capital. General human capital is defined as "generic knowledge and skill, not specific to a task or a company, usually accumulated through working

experiences and education" (Alan et al., 2008). This is drive in in an individual which cannot be transfer to fixed in a specific place he can use his capital anywhere anytime. The specific human capital is usually gathered through education, training, working experience on "knowledge which is specific to a firm or a task" (Alan et al., 2008). the specific human capital cannot be transfers to different places where there usages are specific to place or an industry.

The Students Human Capital success is depends on the students with higher level of skill. Student's human capital focus on the quality of the students. Through that a student is becoming a valuable asset. In the view of the economic perspective, capital is referred to factors of production which is used to create goods or services. Where the humans are main to make the above said process so it can be recognized that students human capital means one of the production elements which can generate added-values through inputting their skills.

Schooling is an investment for student's human capital where costs are incurred in the immediate term with estimated payoff which will accrue in the future. The costs is classified by Schultz into three types. Monetary cost, or direct expenses include tuition fees, expenditures on books and other supplies. Think of opportunity costs, the value of a resource in its next best use. Psychic costs, learning can be wearisome or schooling otherwise unpleasant compared to the next best use of time. Computer education makes the individuals better industrialists. Where it will be major factor for more incentives and payoffs.

Computer education increases the student's productivity in the market place. As per the measurement of the human capital the rate of return for investments in human capital should be the same as investments in physical capital. In the era only having a degree in a specific subject will not increase the human capital but the value added course like computer education raises productivity of the student not only in the labor market, but also in the home and the society. The well-educated parents or a literate one, when it come

to their kids they are more likely to seek and use information to improve the skill of their kids. Schools have been having encouraging the students to use of information and communication technologies, Computers has been used in school and university from the early 1980s the more advanced countries. And those countries have been using the broad band and Wi-Fi from 1990s. In our country usage of the computer and broad band is very limited in schools. Even our schools are using the oldest system and the software's. Our country should improve more advance technology and we have to be the prior in usage of IT in schools.

II. RELATED STUDIES IN SKILL DEVELOPMENT

Galor, (2005)., in his study examined that Investment in human capital is also influenced by income growth, as well as changes in infant mortality rates. The interactions among income, human capital accumulation, and fertility rates must have played an important role in many countries' transitions from low-income, uneducated societies to high-income, well-educated societies and their structural change from rural and agricultural to urban and industrial. In addition, the level of educational attainment is considered to have a strong impact on social and political outcomes, such as democracy and the rule of law.

Edmonds *et al* (2010)., in his study describes that Absent from the theory so far is the empirically demonstrated point that exports can generate income effects that may influence schooling.

Elsner B (2014)., described that Therefore, departing from many studies that focus on the input to the human capital production function, we discover large negative effects of child labour. Moreover, we observe these substantial negative effects despite the fact that close to 90% of child workers in Indonesia work for the family business. This means two things. First, even the kind of child labour that is considered as relatively acceptable already has large negative effects on long-term human capital accumulation. Second, the results also imply that the effects of child labour on human capital accumulation may be worse in other developing countries at lower levels of development than Indonesia, where a higher share of children are working and more child workers are working for wage in factories or other locations outside the household. Thus, child labour remains a phenomenon that needs to be seriously addressed by policymakers, especially in developing countries.

Lucas, (2015), an important qualification of the Barro and Lee data is that they represent a *quantity-based* measure of education (years of school) rather than a *quality-based* measure (e.g. test scores). Quantity- and quality-based measures are correlated, but the latter has proven to be a more powerful predictor of growth in those instances when comparable data has exists.

Humna Ahsan M, Emranul Haque (2017)., Schooling and economic growth the accumulation of

human capital is considered as an important determinant in the process of economic growth. Despite a large literature there is still an ambiguity regarding its role in growth as a number of empirical studies have found an insignificant, in some cases even negative, impact of human capital on growth. However, the focus of these studies has been more on issues related to the use of data and methodology and they assume that the impact of human capital is the same across countries.

III. STATEMENT OF THE PROBLEM

All the parents cannot afford to increase the human capital of their son or their daughter by provide computer education. So the SUITS, computer science programme which creates a new path in school education for skilling students on computer education. SUITS run by the IECD, Bharathidasan University, Tiruchirappalli, and TamilNadu.

IV. A BRIEF PROFILE ABOUT THE STUDY AREA

The skill development programme to school student's conducted through SUITS by IECD, Bharathidasan University, Tiruchirappalli in TamilNadu, India. SUITS programme is in operating at 297 schools, where 286 schools are in TamilNadu and 11 are from Pondicherry. For the present study, samples were collected from 48 respondents, who have studied 2D animation in the SUITS programme during the academic year 2016-2017. School University Industry Tie-Up Scheme is a computer science programme which creates a new path in school education for skill based learning in computer science.

V. METHODOLOGY

The data has been collected through questionnaire method. The data has been analyzed to find out the influence of residence environment on skill development of the student. The structure of the questionnaire is in the Likert fashion, on a five-point scale. Simple random sampling method has been used. The questionnaires were administered directly to the chosen sample from 48 respondents. And SPSS package was used for analyzing the data.

VI. OBJECTIVE OF STUDY

The computer education has very important impact on education. A human capital of students can be increased through three aspects education, physical education and skill development.

1. To find out whether the residence background affect the accusation of computation skills for enhancing student's human capital?

2. To find out the level of academic qualification of parents affect accusation of computation skills for enhancing the student's human capital?
3. To find out whether the usage of computer in residence help the student to improve the student human capital?

VII. HYPOTHESES OF THE STUDY

1. There is no significant association between parent's academic background and the availability of the computer in their houses of the respondents.
2. There is no significant association between nature of the residence and the availability of the computer in their houses of the respondents.
3. There is no significant variation between nature of the residence of the respondents and their opinion about the accusation of computation skills.

4. There is no significant variation between parent's academic background and the student's opinion about the accusation of computation skills.
5. There is no significant difference between gender of the respondents and their opinion about the accusation of computation skills.
6. There is no significant difference between standard of the respondents and their opinion about the accusation of computation skills.
7. There is no significant difference between computer system available in the houses of the respondents and their opinion about accusation of computation skills.
8. There is no significant correlation between the respondents opinion in summative evaluation of accusation of computation skills in the study area.

VIII. ANALYSIS AND INTERPRETATION

Table 1: Demographic profile of the respondents

S.No	Demographic Profile	Particulars	Number of respondents	Percentage
1	Gender	Male	18	29.5
		Female	43	70.5
2	Standard	8 th	58	95.1
		9 th	3	4.6
3	Residential background	Rural	40	65.6
		Urban	19	31.1
		Tribal	4	1.6
4	Parents Qualification	Illiterate	7	11.5
		Upto HSC	24	39.3
		UG	20	32.8
		PG& Above	10	16.4
5	System availability	Yes	39	63.9
		No	22	36.0
6	Usage of system	Yes	37	60.7
		No	23	39.4

From the table 1, it is found that 29.5% of the respondents are male and 70.5% are female, where 95.1% of the respondents are in 8th standard and 4.6% of them are in 9th standard, 65.6% respondents are from the rural area, 31.1% respondents are from the urban area, 1.6% respondents are from the tribal area. 11.5% respondents parents are illiterate, 39.3% respondents parents are studied upto higher secondary level, 32.8%

respondents parents are studied upto UG degree and the rest 16.4% respondents parents are studied up to PG degree. 63.9% of the respondents are having computer system in their home, 36.0% of the respondents are not having computer system in their home, 60.7% of the respondents are using computer, 39.4% of the respondents are not using computers.

Table 2: Description of the respondents according to their perception on accusation of computation skills

S.No	Particulars	N	Mean	S.D	Rank
Career Development					
1	Through Suits, Future Will Be Better	61	4.57	.959	4
2	Suits Not Enhanced My Knowledge	61	2.77	1.345	15
3	Suits Improved My Computation skills	61	4.46	.489	9
4	Suits Is Helpful In Working With Computer Easily	61	4.54	.744	6
5	Suits Helps To Master The Computer Science	61	4.16	.887	13
Opinion On Suits					
6	Teacher Has Completing The Syllabus Periodically	61	4.72	.799	1
7	The Presentation Is Easy To Understand	61	4.57	.459	4
8	The Teaching Methodology Is Fulfilled	61	4.48	.652	7

9	Got More Exposure During Practical Session	61	4.39	.689	10
10	Examinations Of Suits Is Very Much Satisfied	61	4.38	.570	11
Teaching-Learning Method					
11	The Teacher Support During Practical Sessions	61	4.64	.617	2
12	The Ratio Is Adequate For Effective Learning	61	4.30	.651	12
13	The Assignments Helped To Learn The Subject Easily	61	4.43	.743	8
14	The Teaching-Learning Material Is Understandable	61	4.61	.863	3
15	The Allotted Duration For practicals is inadequate.	61	3.46	1.096	14

From the table 2, 15 Individual statements on accusation of computation skills, based on the individual statements mean value, the 15 statements were ranked. Sixth statement ranked first with highest mean value (4.71). The second rank is taken by eleventh statements with mean value (4.62).the third and fourth rank is taken by the statements (14, 7 and 1) with the mean value 4.61

and 4.54consequently.The sixth rank is taken by the statements (4) with the mean value 4.57, seventh, eighth, ninth rank is taken by the statements (8, 13, 3) with the mean value4.48,4.43,4.46. Consequently, the eleventh, twelfth, thirteenth, fourteenth, fifteenth rank taken by the statements (10, 12, 5, 15, 2) with the mean value 4.39, 4.38, 4.16, 3.46, 2.77consequently.

Table 3: Distribution of the respondents according to their perception on computer skill development

S.No	Particulars	S.A	A	N	DA	S.DA
		%	%	%	%	%
Career Development						
1	Through Suits, Future Will Be Better	37	22	2	-	-
		60.7	36.1	3.3	-	-
2	Suits Not Enhanced My Knowledge	9	12	5	26	9
		14.8	19.7	8.2	42.6	14.8
3	Suits Improved My Computation skills	35	19	7	-	-
		57.4	31.1	11.5	-	-
4	Suits Is Helpful In Working With Computer Easily	37	20	4	-	-
		60.7	32.8	6.6	-	-
5	Suits Helps To Master The Computer Science	23	28	8	1	1
		37.7	45.9	13.1	1.6	1.6
Opinion On Suits						
6	Teacher Has Completing The Syllabus Periodically	45	15	1	-	-
		73.8	24.6	1.6	-	-
7	The Presentation Is not Easy To Understand	-	16	5	-	40
		-	26.2	8.2	-	65.6
8	The Teaching Methodology Is Fulfilled	35	22	3	-	1
		57.4	36.1	4.9	-	1.6
9	Got More Exposure During Practical Session	35	15	11	-	-
		57.4	24.6	18.0	-	-
10	Examinations Of Suits Is Very Much Satisfied	27	30	4	-	-
		44.3	49.2	6.6	-	-
Teaching-Learning Method						
11	The Teacher Support During Practical Sessions	44	12	5	-	-
		72.1	19.7	8.2	-	-
12	The Ratio Is Adequate For Effective Learning	30	23	5	2	1
		49.2	37.7	8.2	3.3	1.6
13	The Assignments Helped To Learn The Subject Easily	35	19	5	2	-
		57.4	31.1	8.2	3.3	-
14	The Teaching-Learning Material Is Understandable	40	18	3	-	-

		65.6	29.5	4.9	-	-
15	The Allotted Duration For Practical's Is Inadequate	14	21	7	17	2
		23.0	34.4	11.5	27.9	3.3

The table 3, shows that 37% of the respondents are strongly agrees that through SUITS, future will be better. 60.7% of the respondents are strongly agreed that SUITS not enhanced their knowledge; 57.4% of the respondents strongly agree that SUITS improved their computation skills. Most of the respondents strongly agree that SUITS is helpful in working with computer easily.37.7% of the respondents strongly agree that SUITS help to master the computer science.

More than half of the respondents strongly agree that teacher has completing the syllabus periodically. Most of the respondents strongly disagree that the presentation is easy to understand.57.4% of the respondent strongly agree the teaching methodology is fulfilled.57.4% of the respondent strongly agree that they

got more exposure during practical session. Many of the respondents strongly agree that an examination of SUITS is very much satisfied.

More than half of the respondents strongly agree that the teacher support during practical sessions. Most of the respondents strongly agree that the ratio is adequate for effective learning. More than half of the respondents strongly agree that the assignments helped to learn the subject easily.65.6% of the respondents strongly agree that the teaching-learning material is understandable.3.3% the respondents strongly disagree that the allotted duration for practical's is inadequate.

Hypothesis 1: There is no significant association between residential background and the availability of the computer in their houses.

Table 4: residential background and the availability of the computer in their respondent's home

Computer Education Programme			Computer Availability of System		Total
			Yes	No	
Area Living of	Rural	Count	29	11	40
		% within Area of Living	72.5%	27.5%	100.0%
		% within Availability of System	74.4%	47.6%	65.6%
	Urban	Count	10	10	20
		% within Area of Living	50.0%	50.0%	100.0%
		% within Availability of System	25.6%	47.6%	32.8%
	Tribal	Count	0	1	1
		% within Area of Living	0.0%	100.0%	100.0%
		% within Availability of System	0.0%	4.8%	1.6%
Total	Count	39	22	61	
	% within Area of Living	63.9%	36.0%	100.0%	
	% within Availability of System	100.0%	100.0%	100.0%	

The table 4 Chi-square value showing the association among residential background and available of computer system in study area. This table shows that the residential background has an influence in the availability of the computer in the students' residence.

Hence, the calculated value is greater than table value ($p > 0.05$). So the **null hypothesis is "accepted"**.

Hypothesis 2: There is no significant association between Parents Educational Qualification and the availability of the computer in their houses.

Table 5: Parents Educational Qualification of the Students and the Computer System Availability in their Houses

Computer Education Programme			Computer System Availability		Total
			Yes	No	
Parents Educational Qualification	Illiterate	Count	6	1	7
		% within Parents Qfn	85.7%	14.3%	100.0%
		% within Availability of System	15.4%	4.8%	11.5%
	Upto HSC	Count	12	12	24
		% within Parents Qfn	50.0%	50.0%	100.0%
		% within Availability of System	30.8%	57.1%	39.3%
	UG	Count	13	7	20
		% within Parents Qfn	65.0%	35.0%	100.0%
		% within Availability of System	33.3%	28.6%	32.8%
	PG and above	Count	8	2	10
		% within Parents Qfn	80.0%	20.0%	100.0%

		% within Availability of System	20.5%	9.5%	16.4%
Total		Count	39	22	61
		% within Parents Qfn	63.9%	36.0%	100.0%
		% within Availability of System	100.0%	100.0%	100.0%

Table 5 shows that there is no significant association between parent's educational qualification and computer system availability in the respondent's residence and their opinion about computer educational program. Hence, the calculated value is greater than

table value ($p > 0.05$). So the **null hypothesis is "accepted"**.

Hypothesis 3: There is no significant variation between residence of the students and their opinion about the skill development programme in summative evaluation.

Table 6: Residential Background Of The Students And Their Opinion On Computer Educational Scheme

		Sum Of Squares	DF	Mean Square	F	Sig.
Career Development	Between Groups	7.946	2	3.973	.617	.543
	Within Groups	373.300	58	6.436		
	Total	381.246	60			
Opinion On SUITS	Between Groups	3.423	2	1.711	.352	.705
	Within Groups	281.725	58	4.857		
	Total	285.148	60			
Teaching-Learning Method	Between Groups	20.593	2	10.297	1.546	.222
	Within Groups	386.325	58	6.661		
	Total	406.918	60			

The table 6 showed that the **F-value greater than .05 level, the null hypothesis 3 is "accepted" at the .05 level of significance.** There are no significant differences between residence of the students and their opinion about the computer educational programme.

This show the residences of the student is not affecting the computer skill.

Hypothesis 4: There is no significant variation between gender and the student's opinion.

Table 7: Gender and Their Opinion about the Computer Education Programme about the Computer Educational Scheme

Computer Education Programme		Levene's Test for Equality of Variances and t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Career Development	Equal variances assumed	.438	.511	1.918	59	.060	1.32817
	Equal variances not assumed			2.030	36.407	.050	1.32817
Opinion on SUITS	Equal variances assumed	.069	.794	.546	59	.587	.33592
	Equal variances not assumed			.568	34.955	.574	.33592
Teaching-Learning Method	Equal variances assumed	1.094	.300	1.006	59	.319	.73514
	Equal variances not assumed			.933	27.426	.359	.73514

The above table 7 showed that the **F-value greater than .05 level, the null hypothesis 4 is "accepted" at the .05 level of significance.** There are no significant variation differences between gender of the students and their opinion about the computer education programme in summative evaluation context

at .05 levels. This shows that gender are not affecting the skill development of the students.

Hypothesis 5: There is no significant difference between system availability of the students and their opinion about the computer educational scheme.

Table 8: Availability of System In student's residence And Their Opinion about The Computer Educational Scheme

Computer Education Programme		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Career Development	Equal variances assumed	.833	.365	-1.256	58	.214	-.84615
	Equal variances not assumed			-1.191	35.298	.242	-.84615
Opinion on SUIITS	Equal variances assumed	.058	.811	-.258	58	.798	-.15385
	Equal variances not assumed			-.257	40.713	.799	-.15385
Teaching-Learning Method	Equal variances assumed	.074	.787	-.343	58	.733	-.24176
	Equal variances not assumed			-.346	41.956	.731	-.24176

Table 8 showed that, there are no significant difference between: **availability of system in students residence** and their opinion in summative evaluation (Career Development *P* value- 0.214, Opinion on SUIITS *P* value- 0.798, and Teaching-Learning Method *P* value- 0.733), so the null hypothesis 5 is accepted.

From the data analysis presented in the table 8, found that, there are no significant difference between: **availability of system in student's residence** and their

opinion in summative evaluation. *P*-value of Career Development, Opinion on SUIITS and Teaching-Learning Method are greater than 0.05. Hence, the hypothesis 5 is concluded that **“There are no significant difference between: availability of system in students residence and their opinion in summative evaluation, since the hypothesis 5 is “accepted”.**

Hypothesis 6: There is significant correlation among the evaluation of computer education scheme.

Table 9: Significant Correlation of Evaluation of Computer Education

Computer Education Programme		Career Development	Opinion on SUIITS	Teaching-Learning Method
Career Development	Pearson Correlation	1	.650**	.474**
	Sig. (2-tailed)		.000	.000
	N	61	61	61
Opinion on SUIITS	Pearson Correlation	.650**	1	.672**
	Sig. (2-tailed)	.000		.000
	N	61	61	61
Teaching-Learning Method	Pearson Correlation	.474**	.672**	1
	Sig. (2-tailed)	.000	.000	
	N	61	61	61

The table 9 shows that the *r* values are significant at 0.01 level and the variables are significant at 0.05 levels. Hence it is revealed that there are positive correlations among the variables of evaluation of skill development programme. Hence the hypothesis is “rejected”.

IX. FINDINGS

There is no significant association between parent's academic background and the availability of the computer in their houses of the respondents. There is no significant association between residence and the availability of the computer in their houses of the

respondents. There is no significant variation between residence of the students and their opinion about the computer education. There is no significant variation between parent's academic background and the student's opinion about the computer education. There is no significant difference between gender of the students and their opinion about the computer education. There is no significant difference between standard of the students and their opinion about the computer education. There is no significant difference between system available in the houses of the students and their opinion about computer education. There is no correlation between the students opinion in summative evaluation of computer education in the study area.

X. SUGGESTIONS

- ✓ Human capital is a most important asset in any organization, when a student improves the skill, it is an investment where its need is more and the need will be increased in the future. Thus the scheme should be introduced in every school so that the student's generation will be more capitalized.
- ✓ There is no order or scheduled computer education for the college students also, if SUITS regulate the syllabus for the college students, there will be an order in the computer education among the college.
- ✓ There are many children's in India who are not afford to educated, as per the last census the literacy rate is at 74.04% only at least they can afford the skill development programme if it was introduced.

XI. CONCLUSION

As per the proverb, "If you are planning for a year, grow rice and vegetables; if you are planning for decades, grow trees. But, if you are planning for centuries, educate children. Thus the SUITS have been investing in the students for its part in the most important compound .which student's human capital is a main source for the economic growth. Through the study we can know that there is a relationship exists between investment in students human capital and there growth. We know that investing in the education, learning continuously, improving the skills, learning the skills is essential to compete with others. But there are stills organisations and the people who are thinking that those who are pre-trained in the schools and colleges are good for them. But the need of the labour market should be fulfilled. Today many organisations need different skill sets to meet the on-going changes in the IT for that they should know the basic. Thus through the skill development programme IECD helps the school students to cope up with the need of the labour market and as well as a profession.

REFERENCE

- [1] Cuban, Larry (2001) *Oversold and Underused: Computers in the Classroom*. Cambridge: Harvard University Press.
- [2] Subrahmanyam, K., Greenoeld, P., Kraut, R., & Gross, E. (2001) the impact of computer use on children's and adolescents' development *Applied Developmental Psychology* 22, pp.7-30
- [3] Palacios-Huerta, I. (2003) 'an empirical analysis of the risk properties of human capital returns.' *American Economic Review*, vol. 93 (3), pp. 948-964.
- [4] Ministry of Education (2007) <http://portal.edu.ro/index.php/articles/5212>
- [5] Heckman J., 2011. *The Economics of Inequality: The Value of Early Childhood Education*. *American Education*, 35, 31-35 and 47.
- [6] Woessmann, L., Hanushek, E. and Zhang, L. (2011) 'General Education, Vocational Education, and Labor-

Market Outcomes over the Life-Cycle.' NBER Working Paper 17504.

- [7] Aizer A., 2014. *Rising Inequality and Intergenerational Mobility: The Role of Public Investments in Human Capital*. CESifo Economic Studies. Published online on March 7, 2014. DOI: 10.1093/cesifo/ifu010
- [8] Parthasarathy.K, Vivekanandan.K, Aswini.P.M and Sasiraja.S, (2016), *Effectiveness of the Skill Development Training to School Teachers in Information Technology*, IPASJ International Journal of Information Technology (IJIM), ISSN: 2321-645X, Vol.4, No.8,pp.11-22.
- [9] Parthasarathy.K, Vivekanandan.K and Aswini.P.M, (2016), *Influence of Gender & Teaching Experience on Evaluating the Training Programme*, American International Journal of Research in Humanities, Arts and Social Sciences, Vol.3, No.16, pp.244-248.