

# **Intellectualizing School Children through Competency Training in C Programming**

Dr. K. Parthasarathy<sup>1</sup>, Dr. P. M. Aswini<sup>2</sup>, Ms. R. Jayadurga<sup>3</sup>

<sup>1</sup>Chair - School of Skill Development and Entrepreneurship), Professor and Director, Institute for Entrepreneurship and Career Development, Bharathidasan University, Khajamalai Campus, Tiruchirappalli

<sup>2</sup>Managing Trustee, PASS Foundation, Madipakkam, Chennai - 600091,

<sup>3</sup>Research Scholar, Department of Lifelong Learning, Bharathidasan University, Khajamalai Campus, Tiruchirappalli - 620023

**Abstract:** *Skilling school children will complement them with disciplinary skills and knowledge. It will create opportunities' and skilled expertise in the field of Informational Technology (IT). The present study deals with SUITS (Schools-University-Industry-Tieup-Scheme), an award winning skill development programme in the world provided by IECD (Institute for Entrepreneurship and Career Development) in the academic year of 2016. The research design of the study is descriptive research by describing the characteristics of the competency of skill development programmes. 192 students are the respondents of the study. Purposive sampling method was used to collect the responses from the respondents through structured questionnaire. The major findings show that there are no significance associations among the personal profile and the competency variables of the study due to strong positive responses from the respondents. Through SUITS the students enrolled in C programming can be develop their mastering knowledge in other relevant computer programmes.*

**Keywords:** *IECD, SUITS, Skill Development, Competency Training, C programming*

## **I. INTRODUCTION**

Skill development to school children is the need of the hour for career development. A motivated teaching-learning institution satisfying their student's need and educate them with higher morale. There are number of educational institutions, schools, colleges and universities provided various skill development training for their students. By examining the skill gap in now-a-day skilled employment, they knew very well about the future needs and future requirement of employment in job markets. Participating of younger people make India as developed country. It makeover the students with critical thinking, innovation, creativity and better communication. Students are the gearing factors to support our country's economic growth in future decades.

Institutions like schools and colleges investing in initial skills will explore the differences in diverging development with their independent skills. It will flourish an educated pool of young people by preconditioning them with entrepreneurship skills and career development by addressing a quality education for them. Most of the young people skipping their school education and planned with basic employment to fulfill their family need, this will results in lack of skills and this future generation may suffers the same. To avoid this, the management of educational institutions should make their children participate in development training during their school education. UNESCO, (2017), reported that, supporting the school children by developing national policies, with encouraged stakeholder-ship of youth in country's development. This has been done by, capacity building programmes, edutainment training comprised with education and entertainment for school children, MOOC (Massive Open Online Courses) of skill development, developing youth network with specific skills and establishing multilevel competition in global competition. Providing technical skills for children makes them entrepreneurs in developing their own mobile or android applications, writing game theories, virtual access programming and much more.

### *A. Organizational Profile and Study Area*

IECD was established during the academic year of 2004 to 2005, in the founder- directorship of the corresponding author of this paper. By learning the skill gaps, the author has planned to eliminate the unemployment problem by providing guidance to the younger generation and entrepreneurial training programmes. IECD has been offering over 100 skill development programmes in 10 skill sectors and providing university convocation to the participants. The corresponding author of this paper have arranged a pilot project of providing computer science training to school children in the age group of 5 to 14. The respondents have been chosen from a local school of Tiruchirappalli only in Saturdays and Sundays. 54 school children have chosen as respondents and after the successful monitoring and evaluation of IECD experts committee headed by the corresponding author of the present study, found

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

that the entire project of providing computer programmes namely computer basics, office automation, logo programming, C and C++ programming to school children were very useful for acquisition of computation skills in systematic and scientific way.

In the year of 2009 SUITS was launched by IECD by implementing the programmes in 22 districts in Tamil Nadu. The school children enrolled under SUITS is provided with separate student's text book for their respective programmes, the instructors of the children too provided with teacher's handbook; SUITS also offers free training to in-charge staffs. They have conducted examinations periodically to assess the students, update model question papers with answer keys in IECD official website; the students can self-assess their ability through answering OMR sheets in the website. All the schools enrolled under SUITS are periodically monitored by the representatives of SUITS and its tie-up industries. They have been conducting theory and practical examinations in schools in Tamil Nadu and Puducherry states. The school children are honored with state-level award and price for outstanding school and students. All the students under SUITS are provided with convocation certificate after the completion of the programme. In the year of 2016 to 2017 SUITS was awarded by Unique World Records, Elite World Records, Asian Records Academy, Tamilan Book of Records and India Records Academy for its eminent skill development training for nearly 82,812 students in the academic year of 2016, which is an eminent achievement in the world through the corresponding author of this paper. The present study deals with the student enrolled in SUITS for C programming language in 192 schools in Tamil Nadu and Puducherry. One student was selected from each schools through purposive sampling, in which homogeneous sampling methodology was followed while collecting the responses from the respondents at 192 schools in the study area.

### II. LITERATURE REVIEW

#### A. Parthasarathy, et. al., (2017)

Examined that, the personal profile of the respondents in the skill development programmes positively correlated with the skill development training programme. It shows the involvement of the respondents in skill development training. **TamilNadu Skill Development Corporation, (2016)**, explained that developing a youth with skills will results in developing the economic progress of the nation and societal development of them.

#### B. Sunitha Sangh and Srija A, (2015),

In their research explained that, providing short term skill development programmes will provides an opportunity to learn various courses. Through these programmes, they can achieve additional qualification concurrently during their school or college. **Matilda Gosling and et.al., (2014)**, described about the skill assessment of employees in organizations that people with institutional support can be raised with individual skill development and they performed well in their workplaces. These can be done through forecasting the skill demand and implement sector oriented training in respective fields for the employees.

#### C. Nobel Social Educational Society, (2013),

Explained that educational institutions should provide skill development training through, allocating proper resources like teachers, teaching aids, learning handouts, practical aspects and so on. **Aya Okada, (2012)**, reported that India should invest in training programmers for rural and semi urban youths, by motivating them with explaining our country's economic condition. This can be achieved through proper delivery of educational system through both secondary and higher secondary educations in Indian schools.

#### D. Muriel Dunbar, (2011),

In his research described that, the vocational and skill development training will improvise the economic status of their family, resulting in eliminating the shortage of skills in future. **International Labor Office, (2010)**, reported that there are positive relationship among the employment supply and need in global market and updating operational knowledge of specified skills through simulation methods like online tutoring and presenting relevant videos. According to **Lisa A. Burke and Holly M. Htchins, (2007)**, explained that through skill education, the skill will be transferring through, skill building, diversification of multiple skills, and so on.

### III. RESEARCH METHODOLOGY

Research design of the present study is descriptive research, used to observe the responses from the respondents through standardized questionnaire organized by corresponding author of the present study. Here the authors followed naturalistic descriptive observation, which implies that, the respondents has been observed in their own educational environment, which provides the exact information through survey investigation. Sampling design of the study is Purposive sampling, in which

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

homogeneous sampling methodology was followed while collecting the responses from the respondents. The respondents of the present study having specific characteristics and belong to the maximum age group of 13 years. A structured questionnaire was formulated with 3 factors namely, career development, opinion on SUITS and teaching-learning methods. Each factor contains 5 questions. Based on Likert's 5-point scale, the responses have been calculated through SPSS software. The calculations and results for chi square analysis, ANOVA (Analysis of Variance) and t-test are explained in this paper.

### IV. PROBLEM AND OBJECTIVES

- A. To study about the personal variables of the respondents in the study area.
- B. To find out the distribution of responses of the competence variable of SUITS in the study area.
- C. To find out the association among the respondent's area of living and availability of computers at home.
- D. To find out the association among the respondents' parental education and availability of computers at home.
- E. To find out the association among the respondents' parental education and practice in the computer system at home.
- F. To find out the difference between respondent's gender and the competence variables of SUITS.
- G. To find out the variances between personal variables (respondents' class, area of living and educated parents) and the competence variables of SUITS.

### V. HYPOTHESES

- A. There will be no significant association among respondent's area of living and availability of computers at home.
- B. There will be no significant association among respondent's parental education and availability of computers at home.
- C. There will be no significant association among respondent's parental education and practice at home.
- D. There will be no significant difference between respondent's gender and the competence variables of SUITS.
- E. There will be no significant variance among the respondents' class and the competence variables of SUITS.
- F. There will be no significant variance among the respondents' area of living and the competence variables of SUITS.
- G. There will be no significant variance among the respondents' educated parents and the competence variables of SUITS.

### VI. FINDINGS OF THE STUDY

#### A. General Findings

Table-1 Percentage Analysis showing the Frequency Distribution of personal profile of the respondents

Personal Profile		Frequency	Percent
Gender/Sex	Male	67	34.9
	Female	125	65.1
Class	VIII	186	96.9
	IX	3	1.6
	XI	3	1.6
Area of Living	Rural	115	59.9
	Urban	66	34.4
	Tribal	11	5.7
Educated Parents	Illiterate	34	17.7
	Upto HSC	90	46.9
	UG	41	21.4
	PG and Above	27	14.1
Availability of Computer at home	Yes	108	56.3
	No	84	43.8
Practice at home	Yes	99	56.3
	No	93	43.8

Table-1 shows that 65.1% of the respondents are female and remaining 34.9% are male respondents. 96.9% of the respondents belongs to 8<sup>th</sup> standard, 1.6% belongs to 9<sup>th</sup> standard and 1.6% belongs to 11<sup>th</sup> standard. Nearly 59.9% of the respondents living in

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

rural area and 34.4% of the respondents living in urban and only 5.7% of the respondents belongs to the tribal area. 46.9% of the respondent's parents are educated upto higher secondary education, 21.4% of the respondent's parents are under graduates, 17.7% are illiterates and 14.1% are educated with post-graduation and above. 56.3% of the respondents are having computers in their home, hence they are practicing their practical exercises in home and 43.8% of them are not having, hence they can't practice at home.

Table-2 Distribution of Competence Variables of SUITS

Competence Variables of SUITS	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Career Development	SUITS gives a better future	109 (56.85)	69 (39.9)	4 (2.21)	7 (3.63)	3 (1.6)
	SUITS not enhancing computer knowledge	32 (16.7)	38 (19.8)	14 (7.3)	69 (35.96)	39 (20.3)
	SUITS improves individual skills	125 (65.1)	59 (30.7)	7 (3.6)	1 (0.5)	-
	SUITS provides practical fluency	133 (69.3)	54 (28.1)	5 (2.6)	-	-
	SUITS mastering other relevant subjects	96 (50)	82 (42.7)	11 (5.7)	2 (1)	1 (0.5)
Opinion on SUITS	Syllabus periodically completed by instructors	137 (71.4)	46 (24)	8 (4.2)	1 (0.5)	-
	Simple and easy tutoring	145 (75.5)	44 (22.9)	3 (1.6)	-	-
	Fulfilling methodology of instructors	130 (67.7)	54 (28.1)	6 (3.1)	1 (0.5)	1 (0.5)
	Practical session provides more exposures	114 (59.4)	66 (34.4)	7 (3.6)	2 (1)	3 (1.6)
	Satisfied with examination	120 (62.5)	61 (31.8)	10 (5.2)	1 (0.5)	-
Teachin-Learning Methods	Instructors support during practicals	142 (74)	48 (25)	2 (1)	-	-
	Adequate computer system for students	95 (49.5)	75 (39.1)	18 (9.4)	4 (2.1)	-
	Knowledge updation through assignments and projects	105 (54.7)	77 (40.1)	10 (5.2)	-	-
	Understandable Teaching-Learning materials	121 (63)	59 (30.7)	10 (5.2)	2 (1)	-
	Insufficient practical hours	58 (30.2)	54 (28.1)	28 (14.6)	35 (18.2)	17 (8.9)

Based on the table-2, 56.85% of the respondents agreed that SUITS will better future for their future development, 35.96% of the respondents disagree about the variable, SUITS not enhancing computer knowledge. It reveals that through SUITS, students will be enhance their computer knowledge. Nearly 65.1% of the respondents strongly agreed SUITS have improved their individual skills. 69.3% of the respondents have strongly agreed that with the help of SUITS they were trained up fluently with computer typing and programming skills. 50% of the respondents strongly agreed that, SUITS helps them to learn other computer science subjects efficiently.

Nearly 71.4% of the respondents strongly agreed that their SUITS in-charge staffs are periodically completing their syllabus. 75.5% of the respondents are strongly agreed that their in-charge staffs instructing their syllabus through their effective presentation.

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

59.4% of the respondents strongly agreed that they have experienced more exposure in computer practicals through SUITS. 62.5% of the respondents strongly agreed that they are satisfied with the SUITS examination conducted by IECD.

74% of the respondents strongly agreed that, their in-charge staffs have supported a lot through practical sessions. 49.5% of the respondents strongly agreed that, the computers provided for their lab was sufficient for all of them to learn. 54.7% of them responded strongly agree that, they were very much privileged in C programming through the assignments and projects allotted for them by their in-charge staffs. 63% of them responds strongly agree that, the students handbook are very easy to learn and the in-charge staffs are made their tutoring understandable through teacher’s handbook provided for SUITS.

### B. Hypotheses Related Findings

Table-3 Chi Square Showing the Association between respondent’s Area of Living and Availability of Computer at home

Competence Variables of SUITS			System availability		Total
			Yes	No	
Area of Living	Rural	Count	61	54	115
		% within Area of Living	53.0%	47.0%	100.0%
		% within System availability	56.5%	64.3%	59.9%
	Urban	Count	41	25	66
		% within Area of Living	62.1%	37.9%	100.0%
		% within System availability	38.0%	29.8%	34.4%
	Tribal	Count	6	5	11
		% within Area of Living	54.5%	45.5%	100.0%
		% within System availability	5.6%	6.0%	5.7%
Total	Count	108	84	192	
	% within Area of Living	56.2%	43.8%	100.0%	
	% within System availability	100.0%	100.0%	100.0%	
$\chi^2=1.42$ and $Sig=0.49$					

Table-3 shows that shows that Pearson’s chi square value is 1.42 and its 2-tailed significant level is greater than 0.05. Hence there are no significant association between respondents’ area of living and availability of computers at home of the respondents. Thus, the hypothesis-1 is ‘accepted’.

Table-4 Chi Square Showing the Association between Respondent’s Parental education and Availability of Computer at home

Competence Variables of SUITS			System availability		Total
			Yes	No	
Educated Parents	Illiterate	Count	17	17	34
		% within Edu. Parents	50.0%	50.0%	100.0%
		% within System availability	15.7%	20.2%	17.7%
	Upto HSC	Count	42	48	90
		% within Edu. Parents	46.7%	53.3%	100.0%
		% within System availability	38.9%	57.1%	46.9%
	UG	Count	27	14	41
		% within Edu. Parents	65.9%	34.1%	100.0%
		% within System availability	25.0%	16.7%	21.4%
	PG and Above	Count	22	5	27
		% within Edu. Parents	81.5%	18.5%	100.0%
		% within System availability	20.4%	6.0%	14.1%

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

Total	Count	108	84	192
	% within Edu. Parents	56.2%	43.8%	100.0%
	% within System availability	100.0%	100.0%	100.0%
$\chi^2= 12.420$ and Sig=0.06				

Table-4 shows that shows that Pearson’s chi square value is 12.42 and its 2-tailed significant level is greater than 0.05. Hence there are no significant association between respondent’s educated parents and availability of computers at home of the respondents. Thus, the hypothesis-2 is ‘accepted’.

Table-5 Chi Square Showing the Association between Parental education and practice at home

Competence Variables of SUITS			Practice at home		Total
			Yes	No	
Educated Parents	Illiterate	Count	12	22	34
		% within Edu. Parents	35.3%	64.7%	100.0%
		% within Usage in Computer	12.1%	23.7%	17.7%
	Upto HSC	Count	46	44	90
		% within Edu. Parents	51.1%	48.9%	100.0%
		% within Usage in Computer	46.5%	47.3%	46.9%
	UG	Count	22	19	41
		% within Edu. Parents	53.7%	46.3%	100.0%
		% within Usage in Computer	22.2%	20.4%	21.4%
	PG and Above	Count	19	8	27
		% within Edu. Parents	70.4%	29.6%	100.0%
		% within Usage in Computer	19.2%	8.6%	14.1%
Total		Count	99	93	192
		% within Edu. Parents	51.6%	48.4%	100.0%
		% within Usage in Computer	100.0%	100.0%	100.0%
$\chi^2= 12.420$ and Sig=0.05					

Table-5 shows that Pearson’s chi square value is 12.42 and its 2-tailed significant level is equal to 0.05. Hence there are significant association between educated parents and practice at home of the respondents. It implies that respondent’s educated parents can help their children to practice their C programming exercises at home. Thus, the hypothesis-3 is ‘accepted’.

Table- 6 T Test showing Difference between Gender and Competency Variables of SUITS

Competence Variables of SUITS		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Career Development	Equal variances assumed	.179	.673	.399	190	0.690
	Equal variances not assumed			.393	129.513	0.695
Opinion about SUITS	Equal variances assumed	.831	.363	-.390	190	0.697
	Equal variances not assumed			-.400	145.070	0.690
Teaching - Learning Method	Equal variances assumed	.196	.658	-.045	190	0.964
	Equal variances not assumed			-.044	129.082	0.965

Table-6 shows that the 2-tailed significant value is greater than 0.05. It indicates that there is no significant difference between gender and competence variables of SUITS in the study area. Thus, the hypothesis- 4 is ‘accepted’.

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

Table-7 ANOVA Showing Variance among the Respondents' class and Competency Variables of SUITS

Competence Variables of SUITS		Sum of Squares	df	Mean Square	F	Sig.
Career Development	Between Groups	12.449	2	6.225	1.332	0.266
	Within Groups	883.296	189	4.674		
	Total	895.745	191			
Opinion about SUITS	Between Groups	10.700	2	5.350	1.504	0.225
	Within Groups	672.280	189	3.557		
	Total	682.979	191			
Teaching - Learning Method	Between Groups	27.871	2	13.935	2.806	0.063
	Within Groups	938.796	189	4.967		
	Total	966.667	191			

Table-7 shows that the significant values of competence variables of SUITS are greater 0.05, hence there are no significant variance among the respondent's class and competence variables of SUITS. Thus, hypothesis-5 is accepted

Table-8 ANOVA Showing Variance among the Respondents' Area of living and Competency Variables of SUITS

Competence Variables of SUITS		Sum of Squares	df	Mean Square	F	Sig.
Career Development	Between Groups	21.328	2	10.664	2.305	0.103
	Within Groups	874.417	189	4.627		
	Total	895.745	191			
Opinion about SUITS	Between Groups	15.494	2	7.747	2.194	0.114
	Within Groups	667.485	189	3.532		
	Total	682.979	191			
Teaching - Learning Method	Between Groups	8.057	2	4.028	.794	0.453
	Within Groups	958.610	189	5.072		
	Total	966.667	191			

Table-8 shows that the significant values of competence variables of SUITS are greater 0.05, hence there are no significant variance among the respondent's area of living and competence variables of SUITS. Thus, hypothesis-6 is accepted

Table-9 ANOVA Showing Variance among the Respondents' educated parents and Competency Variables of SUITS

Competence Variables of SUITS		Sum of Squares	df	Mean Square	F	Sig.
Career Development	Between Groups	24.024	3	8.008	1.727	0.163
	Within Groups	871.721	188	4.637		
	Total	895.745	191			
Opinion about SUITS	Between Groups	20.229	3	6.743	1.913	0.129
	Within Groups	662.750	188	3.525		
	Total	682.979	191			
Teaching - Learning Method	Between Groups	.832	3	.277	0.054	0.983
	Within Groups	965.834	188	5.137		
	Total	966.667	191			

Table-9 shows that the significant values of competence variables of SUITS are greater 0.05, hence there are no significant variances among the respondent's class and competence variables of SUITS. Thus, hypothesis-7 is 'accepted'.

## International Journal for Research in Applied Science & Engineering Technology (IJRASET)

### VI. CONCLUSION

Based on the analyses, it is concluded that, maximum respondents of the study area are class VIII students and majority of them are girls. Students from nearby villages utilizing their secondary school education and acquiring their skill development through SUITS. Though they are from rural background their parents are educated only upto higher secondary, who love to make their children educated and skillful in computer science field. Majority of the parents provided their children with a computer in their home and help their children to practice C programmes at home. This makes the children more convenient to perform well in practical examination.

The hypotheses related findings shows that, there are no significant association among the respondent's area of living and availability of computers at home, which shows that in spite of living in rural and tribal background, parents brought computers for their children to develop their computer learning skills. There are significant association among respondent's parental education parents and availability of computers at home. It implies that, parents of the respondents are educated secondary school and some of them area illiterates, hence they like to develop their children by providing valuable education and skills to them by providing computers for them, make them involved in SUITS for a better future. There is no difference between respondent's gender and competence variables of SUITS in the study area. There are no significant variations among the respondent's class and area of living with the competence variables of SUITS in the study area.

IECD provided separated handbook for students and in-charge computer staffs. It helps both of them to understand about the C language and scripting. It will improve their individual skill development and develop their ability in writing C language. Students can easily improve their career development through C language. By learning C language through SUITS, they learn to write C programmes for various application in their future career. C language is the base language for Linux operating system, to perform C++ and Java programming, neural network engineering, python programming, firmware development, GUI (Graphical User Interface) development, writing multi-threading programmes, network protocols, perl programming, to develop data structure, developing HTTP (Hyper Text Transfer Protocol), socket programming, shell scripting, developing dot net programmes, project development, to write coding for microcontrollers, writing prolog and ruby programming, writing softwares for PLC (Programmable Logic Controller) which is used in built-in-operating system, utilized in departmental store billing, EB billing, Bluetooth, motherboards, mainframe computers, etc., IECD provides an opportunity to encourage students with university convocation in their school level, make them feel more confident for future oriented goals. IECD also motivated them with gold medal for the toppers and selected best students by examining their performances. Students also experience better results in a short period of time through SUITS.

### REFERENCES

- [1] Aya Okada, (2012), Skill Development for Youth in India, Journal of International Cooperation in Education, Vol. 15, No. 12, pp. 169 – 191
- [2] Confederation of Indian Industry(CII)", Focus of the month, November- December (2015), pg 42-46
- [3] International Labor Office, (2010), "A Skilled Workforce for Strong, Sustainable and Balanced Growth", a Training Strategy, Published by ILO, Geneva, Pg. 3-13
- [4] Lisa A. Burke and Holly M. Htchins, (2007), "Training Transfer: An Integrative Literature Review", Human Resource Development Review, Vol. 6, No. 3, Pg. 263-270
- [5] Matilda Gosling, Sara Fakhro and Tara Kennedy, (2014), Skills Assessment in India, British Council and International Labor Organization, A Discussion paper on policy, practice and capacity, United States of America, pp. 13-28
- [6] Muriel Dunbar, (2011), "Engaging the Private Sector in Skills Development", Department for International Development, Human Development Resource Centre (HDRC), London, Pg. 4- 8
- [7] Noble Social and Educational Society, (2013), Impact Of Skill Development Programmes Of Jan Shikshan Sansthan"s On The Neo-Literates In The States Of Andhra Pradesh, Tamil Nadu, Karnataka And Kerala, Research Study Report, Sponsored by Planning Commission of Government of India, New Delhi, Pg. 129-133
- [8] Parthasarathy, K, Shanmuga Priya, P.M, Sasiraja, S and Jayadurga. R, (2016), Impact of Skill Development Training among School Teachers, International Journal of Business and Management Invention, Vol.5, No.1, pp.65-74
- [9] Parthasarathy K, Aswini P.M. and Jayadurga R, (2016), Exploring the Imperatives of Skill Development Training through School Teachers of Tirunelveli, Tamil Nadu, International Research Journal of Management Sciences & Technology, Vol.7, No.6, pp. 49-66
- [10] Parthasarathy K, Aswini P.M. and Jayadurga R, (2017), Strategic Evaluation of Skill Development Programmes among Academic Heads, International Journal for Scientific Research & Development, Vol. 4, Issue 1, pp. 485-489
- [11] Sunita Sangh and Srijia A., (2015), "Skill Development and Productivity of the Workforce
- [12] Tamil Nadu Skill Development Corporation, (2016), URL:<https://tnvelaivaippu.gov.in/ongoingTraining.html>
- [13] UNESCO,(2015), Youth 2.0- Building Skills and Bolstering Peace, Integrated framework published in UNESCO's international conference, UNESCO Headquarters, Paris, France.