

## Measuring Effectiveness of Adult Literacy Program in India

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### Abstract

The study assesses the problems of Adult Literacy Programs (ALP) in India with special reference to Sakshar Bharat Program in Uttarakhand. The response analysis of two key stakeholders, one as a learner (those to whom this program is made for) and other as functionaries (those by whom this program is executed) have been utilised for the research work. Data have been analysed through statistical techniques like Karl Pearson's coefficient correlation and ANOVA computed through SPSS. Findings of the research work reveal that the contents of the program are not linked to the learner's economic activities and infrastructure is not satisfactory.

**Keywords-** Adult Literacy, Learner, Functionary, ALP.

### 1. Introduction

Literacy is only a potential tool that can be used for a variety of economic, social, political, and cultural purposes, the motives of launching literacy programs may be socio-political, economic, and demand-meeting (Lind and Johnston, 1990). India recognised education as a fundamental right with the enactment of Right to Education Act in 2010. It took almost 63 years, post-independence to establish education as a fundamental right. Although, many efforts undertaken by central and state governments to provide education to all and to eradicate illiteracy from the country (Padak and Padak, 1991). Education is the foundation stone for social and economic development of a nation. Education improves the quality of life in terms of increase in life expectancy, increase in healthy living, increased nutritional levels of women and children, increased capability to contribute towards social, cultural and economic development. Education is a much wider term than literacy. Most of the time literacy and education is misunderstood, education is much wider term, literacy is the first step of learning which involves ability to read, write, use of language and learning of basic arithmetic, thus, an illiterate person is one who is not able to do any of these activities. In post-independence phase, major focus has revolved around eliminating illiteracy from the society. Illiteracy was a major problem area for social, economic and environmental development of the country. Blunkett (2000), in his book he clearly mentioned, a prosperous and decent society is one in which everybody has the skills they need to be productive at work, active in their community, and fulfilled in their personal and family life. We cannot achieve this ambition for our society while large numbers of people lack basic literacy and numeracy skills.

The most important official confirmation of the need for expanding adult education services in India came in the form of the National Policy Resolution of 1968. The National Adult Education Program (NAEP) defined adult education as literacy, functionality, and conscientization, and although its structures were eventually established, they did not always function effectively (Bhola, 1987). India endorsed the World Declaration of Education for All (EFA) adopted by the world conference of education at Jomtien (1990) (King, 2011), India has made significant strides to impart elementary education and adult education in 1990s (Govinda, 2002). However, the major thrust of basic education reforms in India remained on elementary education, and not on adult education and lifelong learning and as such the vast majority of youth and adults, has either remained illiterate or with low level of education (Srivastava and Patel, 2006).

## **2. Review of Literature**

Literacy is the first step of learning which involves ability to read, write, use of language and learning of basic arithmetic. Thus, an illiterate person is one who is not able to do any of these activities. Post-independence major focus has revolved around eliminating illiteracy from the society. A prosperous and decent society is one in which everybody has the skills they need to be productive at work, active in their community, and fulfilled in their personal and family life. We cannot achieve this ambition for our society while large numbers of people lack basic literacy and numeracy skills (Blunkett, 2000).

Illiteracy was a major problem area for social, economic and environmental development of the country. In 1947, literacy rate in India was at 12 percent, which means, 88 out of every 100 people were not able to read, write and do basic arithmetic. As per 2011 census, literacy rate stands at 74.04 percent. From 1947 to 2011, India has come a long way in improving literacy rate across the nation. It is noteworthy to mention that India became second largest populated country within the same period; hence, the rise of literate population from 12 percent to 74.04 percent is certainly commendable. Still India stands below the world average literacy rate of 86.3 percent. Male literacy rate in India figured as 80.9 percent and for female at 72.1 percent, whereas world average stood at 90 percent and 86.3 percent for male and female respectively. The most important official confirmation of the need for expanding adult education services in India came in the form of the National Policy Resolution of 1968. The National Adult Education Program (NAEP) defined adult education as literacy, functionality, and conscientization, and although its structures were eventually established, they did not always function effectively (Bhola, 1987). India endorsed the World Declaration of Education for All (EFA) adopted by the world conference of education at Jomtien (1990) (King, 2011), India has made significant strides to impart elementary education and adult education in 1990s (Govinda, 2002). However, the major thrust of basic education reforms in India remained on elementary education, and not on adult education and lifelong learning and as such the vast majority of youth and adults, has either remained illiterate or with low level of education (Srivastava and Patel, 2006).

In India, rural literacy rate reflects a mere 69 percent and urban literacy rate at 85 percent. Rural India with lack of infrastructure like, availability of schools / learning centres, proper road and transport facility, availability of learning tools, availability of basic civic amenities at the schools and availability of teachers and staff at the schools. Apart from these infrastructural factors other reasons for low literacy rate in rural areas is social, cultural, economic and conservative approach of the rural population. Learning of reading and writing skills, although necessary, but is not sufficient and does not fulfil the requirements of various segments of the population such as male, female, children, adults, tribal people, rural people, urban dwellers, farmers, labourers.

### **3. Meaning of Adult Education**

“Education is the basic tool for development of consciousness and reconstitutions of society” (Mahatma Gandhi). Adult literacy may be conceived of as level of ability, that enable a person to enter and functions effectively in the workforce. Formerly perceived as contrast with sharp division, illiteracy and literacy are now considered as a part of the same continuum. Thus literacy is a part of educational process by which a person’s mind and characters are constantly developing (Saini, 2000).

Adult education can be referred as formal education for adults with difference in ways of teaching, major focus on the execution of adult education started in 1950 with the objective of teaching 3Rs (reading, writing and arithmetic) to the illiterate population in the desired age group. Adult education, due to low literacy rate, majorly confined up-to adult literacy only. Although continuing education and skill development enhances the overall idea of adult education in India.

### **4. Objectives of the Research Work**

The objectives of the research work are mentioned as below:

- To identify the problems of SBP in Uttarakhand as per Learners and Functionaries
- To examine the difference between the responses of learners and functionaries

#### ***Hypothesis A***

H<sub>01</sub>: There are no significant problems of SBP in Uttarakhand as per Learners and Functionaries

H<sub>A1</sub>: There are significant problems of SBP in Uttarakhand as per Learners and Functionaries

#### ***Hypothesis B***

H<sub>02</sub>: There is no significant difference between the responses of Learners and Functionaries

H<sub>A2</sub>: There is significant difference between the responses of Learners and Functionaries.

## 5. Methodology

In the present study primary and secondary data are incorporated, interviews and questionnaires as a tools have been selected for measuring the response of learners and functionaries which pertained to primary data and macro level data collected through secondary sources like reports, census, articles and other researches. Secondary data sources helped in understanding the macro level scenario of adult education. Primary data pertains to learners and functionaries of adult education programmes executed in Uttarakhand. A sample of 162 each learners and functionaries have been taken from the two districts. Likert Five-point scale of has been used to measure the response of functionary and leaners, further the response has been assessed through Karl Pearson's Correlation Coefficient and ANOVA.

## 6. Sample Size

As a sample area Udham Singh Nagar (US Nagar) and Champavat districts are selected. Udham Singh Nagar is selected because of least literacy rate among the 13 districts of the state and Champavat has the highest disparity between male and female literacy rate.

**Table 1. Block wise population and literacy data for Champawat and Udham Singh Nagar**

Districts	Blocks	Villages#	Population	Literacy rate (%)		
				Total	Male	Female
Champavat	Champavat	244	54524	79.93	91.56	68.15
	Pati	156	45504	80.72	93.88	67.57
	Barakot	100	73143	76.07	91.67	61.34
	Lohaghat	144	86477	78.51	92.63	65.65
Udham Singh Nagar	Jaspur	102	170315	73.59	81.73	64.70
	Kashipur	75	283136	77.68	84.45	70.21
	Bajpur	86	188083	66.43	75.45	56.59
	Gadarpur	69	174848	71.26	79.83	62.01
	Kiccha	86	390866	72.24	79.48	64.18
Udham Singh Nagar	Sitarganj	123	214428	71.95	80.64	62.70
Udham Singh Nagar	Khatima	88	227226	76.39	85.24	67.39

[Source: [www.censusindia.gov.in/handbookPartAChampawat/](http://www.censusindia.gov.in/handbookPartAChampawat/)]

**Table 2. Selected villages (block wise)**

Champawat; Block Barakot		Udham Singh Nagar; Block Bajpur	
Villages	Population	Villages	Population
Raighaon	1257	Bajpur	5746
Barakot	1122	Barhani	5662
Kakrah	969	Bannakhera	5660
BairaBadwal	777	Chakarpur	5464
Sigda	772	Maheshpura	5328

[Source: [www.censusindia.gov.in/handbookPartAChampawat/](http://www.censusindia.gov.in/handbookPartAChampawat/) and [www.censusindia.gov.in/handbookPartAUdhamsinghnagar/](http://www.censusindia.gov.in/handbookPartAUdhamsinghnagar/)]

Champawat and Udham Singh Nagar comprise of four blocks and seven blocks respectively, one block of each district has been and five villages of each districted has been selected. Considering factors like time, cost, resources and travel, five villages each from the two blocks

selected from the two districts chosen for the final sample area. The ten villages selected on the parameters of having highest population within the block.

Respondents of above-mentioned ten villages comprised of two categories namely *Learners and Functionaries*. Learners are the participants of adult literacy program and functionaries are block coordinators, whereas functionaries of this program are categorised like Block Coordinators (Outsource agencies at block level), Voluntary Teachers, Preraks (Managers of ALP at village level) and Panchayati *Raj* Institutions (PRI) Members (members of Zila Panchayat and Village Panchayat). Champawat, 68 functionaries comprised of one block coordinator, 24 Voluntary Teachers (VTs), 22 Preraks and 21 PRI members. From Udham Singh Nagar, 94 functionaries comprised of one block coordinator, 31 each of VTs, Preraks and PRI members (Table 3). Total of 324 respondents (162 learners and 162 functionaries) participated in the survey for the research work through five separately designed structured questionnaires for learners and four functionaries. Apart from the questionnaire technique, Focused Group Discussions (FGD) conducted one in each of the ten villages.

**Table 3. Respondent bifurcation**

Respondents / Districts		Champawat	Udham Singh Nagar	Total
Learners		77	85	162
Functionaries	Block Coordinators	1	1	2
	Voluntary Teachers	24	31	55
	Preraks	22	31	53
	PRI members	21	31	52
	Total	68	94	162

## 7. Data Analysis and Discussion

### 7.1 Learner's Responses

This study has measured the response of learner on Likert five-point scale (Table 4), learners attending SBP provides positive inference to the adult education process. Out of four options given in the question two are positive namely, 'talk positively about the program' and 'appreciate your effort'. These options collectively constitute 119 respondents that are 73 percent of 162 respondents. In Champawat, where female learners constitute 94 percent of the respondents, these two positive reactions constitute of 54 respondents that is 76 percent of the respondents in the district. Similarly, Udham Singh Nagar also represents 71 percent of the respondents acknowledging positive reaction on attending SBP.

It was observed during the survey with learners that attendance at the classes is satisfactory and their interest of having classes regularly is very high. Most of the learners wanted the classes to be held daily. The learner showed divergent views regarding the timing of the classes. It was inferred from the responses that the learners want classes to be conducted on continuous basis, and they would keep attending as per their time availability on daily basis. The survey of learners revealed that classroom infrastructure is not satisfactory. The classroom infrastructure encompasses condition of classroom and learning aids like books, pencil, paper and copies.

Learners exhibited their interest regarding more interactive contents in learning material like animated pictures, videos etc. Learners showed their interest in learning digital technology, professional education and story-telling to be included in the curriculum apart from reading, writing, mathematics, Hindi and English. Learners expressed their enthusiasm on inclusion of reward and recognition in the adult learning programme for learners as well as for Preraks and VTs.

**Table 4. Learner’s responses to adult education program in Uttarakhnad**

Statements	Strongly Agree	Agree	Nether Agree Nor Disagree	Disagree	Strongly Disagree
Education centers are well constructed and well maintained	28 (17%)	30 (19%)	29 (18%)	44 (27%)	31 (19%)
Education center is conveniently accessible	29 (18%)	30 (19%)	28 (17%)	44 (27%)	31 (19%)
Class timing are convenient for learners	28 (17%)	34 (21%)	29 (18%)	38 (23%)	33 (20%)
All study materials and teaching materials are always adequately available	28 (17%)	29 (18%)	27 (17%)	45 (28%)	33 (20%)
The content of the material is relevant and useful	28 (17%)	35 (22%)	29 (18%)	38 (23%)	32 (20%)
Content should include messages on women empowerment	34 (21%)	41 (25%)	29 (18%)	30 (19%)	28 (17%)
Content must include more animated stories	31 (19%)	44 (27%)	29 (18%)	28 (17%)	30 (19%)
Learners attend classes regularly, without absenteeism	29 (18%)	31 (19%)	28 (17%)	44 (27%)	30 (19%)
Learners are able to retain education for longer period of time	28 (17%)	30 (19%)	29 (18%)	43 (27%)	32 (20%)
Adult Education should be driven through technology	31 (19%)	42 (26%)	29 (18%)	32 (20%)	28 (17%)
Adult education should contain skill development and professional development	33 (20%)	42 (26%)	28 (17%)	30 (19%)	29 (18%)
Adult Education should include general awareness of government policies	28 (17%)	47 (29%)	27 (17%)	31 (19%)	29 (18%)
Reward and recognition should be more expressive and frequent in nature	31 (19%)	46 (28%)	27 (17%)	30 (19%)	28 (17%)
Efforts of VTs and perks must be recognized through reward, award and recognition	31 (19%)	44 (27%)	30 (19%)	29 (18%)	28 (17%)

## 7.2 Functionary’s Responses

Collectively functionaries expressed their views regarding SBP being different than earlier education programmes (Huang and Liaw, 2018). Major reasons cited by the functionaries are skill development, organised and timely examination (Table 5), functionaries acknowledged that villagers are well aware about the SBP and the programme has been extremely beneficial for the learners. SBP’s performance regarding quality in service delivery and overall programme effectiveness has given a satisfactory and moderate response. According to functionaries, after participating at the SBP classes, learners became outgoing, can freely visit banks and transact, participate in *Gram Sabhas* and can talk to government officials. They also expressed that infrastructure facilities like classroom conditions, learning materials and teaching materials are not adequate.

Participation level of learners in the education programme was reported as average by the functionaries. Irregular attendance, timing of classes, family problems, gender related problems and drop-out were identified as the major reasons for low participation level of the learners. Further, reasons for drop-outs were identified as lack of interest, lack of motivation, lack of employment generating capability of the programme, lack of family support and migration to cities for work. Functionaries acknowledged the use of ICT in the teaching process at the programme and also advocated inclusion of professional and economic education in the programme.

**Table 5. Functionary’s responses to adult education program in Uttarakhnad**

Statements	Strongly Agree	Agree	Nether Agree Nor Disagree	Disagree	Strongly Disagree
Education centers are well constructed and well maintained	6 (4%)	16 (10%)	32 (20%)	97 (60%)	11 (7%)
Education center is conveniently accessible	11 (7%)	18 (11%)	33 (20%)	87 (54%)	13 (8%)
Class timing are convenient for learners	10 (6%)	39 (24%)	22 (14%)	79 (49%)	12 (7%)
All study materials and teaching materials are always adequately available	7 (4%)	32 (20%)	22 (14%)	89 (55%)	12 (7%)
The content of the material is relevant and useful	11 (7%)	18 (11%)	33 (20%)	87 (54%)	13 (8%)
Content should include messages on women empowerment	29 (18%)	89 (55%)	19 (12%)	18 (11%)	7 (4%)
Content must include more animated stories	29 (18%)	98 (60%)	9 (6%)	20 (12%)	6 (4%)
Learners attend classes regularly, without absenteeism	8 (5%)	28 (17%)	14 (9%)	96 (59%)	16 (10%)
Learners are able to retain education for longer period of time	12 (7%)	21 (13%)	8 (5%)	103 (64%)	18 (11%)
Adult Education should be driven through technology	25 (15%)	102 (63%)	16 (10%)	12 (7%)	7 (4%)
Adult education should contain skill development and professional development	28 (17%)	106 (65%)	11 (7%)	9 (6%)	8 (5%)
Adult Education should include general awareness of government policies	27 (17%)	110 (68%)	9 (6%)	10 (6%)	6 (4%)
Reward and recognition should be more expressive and frequent in nature	22 (14%)	100 (62%)	10 (6%)	19 (12%)	11 (7%)
Efforts of VTs and preraks must be recognised through reward, award and recognition	28 (17%)	91 (56%)	16 (10%)	15 (9%)	12 (7%)

### 7.3 Karl Pearson’s Correlation Coefficient Test of Responses between Learners and Functionaries

Pearson’s correlation coefficient is the statistical tool to measure the relationship between two variables. It is based on the model of covariance and hence is considered as the best method to measure the relationship between two variables. It shows the magnitude of the association and direction of the relationship. The data reflects the value of Karl Pearson’s correlation coefficient for variables in likert scale between learners and functionaries. The resultant values are closer to +1 which represents and signifies the responses of learners and functionaries are positively correlated.

**Table 6. Karl Pearson’s correlation coefficient between responses from learners and functionaries**

Statements	Karl Pearson's Correlation Coefficient
Education centers are well constructed and well maintained	0.844
Education center is conveniently accessible	0.924
Class timing are convenient for learners	0.895
All study materials and teaching materials are always adequately available	0.890
The content of the material is relevant and useful	0.877
Content should include messages on women empowerment	0.868
Content must include more animated stories	0.875
Learners attend classes regularly, without absenteeism	0.852
Learners are able to retain education for longer period of time	0.820
Adult Education should be driven through technology	0.800
Adult education should contain skill development and professional development	0.774
Adult Education should include general awareness of government policies	0.759
Reward and recognition should be more expressive and frequent in nature	0.835
Efforts of VTs and preraks must be recognized through reward, award and recognition	0.870

#### 7.4 Learners and Functionaries (ANOVA Test)

Analysis of variance (ANOVA) is a statistical tool that segregates the variable proportions of the two data sets as systematic factors and random factors. The systematic factors are those that influence the data set, but random factors are those that do not influence the data sets. Test of analysis of variance is used by many analysts to assess the impact of independent variables on the dependent variables. F-test is used to determine the result of the impact on the dependent variables. Analysis of Variance can be used for two or more groups of variables at the same time. The test determines the variance in two fold, between the groups and within the samples. This study shows ANOVA (Table 7) computation for each statement between the samples of learners and beneficiaries. Table Value of F-ratio at 0.01 significance level and at degree of freedom of 157, 4 is 13.463. Calculated F-value for each variable is larger than the table value of 13.463, thus concluding that null hypotheses stands rejected and alternate hypotheses are accepted. P Value for each statement is less than 0.001, which signify that there is 0.001 percent probability to find similar results for variables as mentioned in the table.

Hypothesis A has been tested through ANOVA that resulted in F-value higher than the table value of 13.463 and  $p < 0.005$  for all statements, which reveals that responses of both learners and functionaries highlight the problems like lack of adequate infrastructure, insufficient teaching and learning materials, learning content lack economic viability and lack of recognition for functionaries. Thus, Null Hypothesis has been rejected and alternate hypothesis has been accepted stating “There are significant problems of SBP in Uttarakhand as per Learners and Functionaries”.

Hypothesis B has been tested through Karl Pearson’s Coefficient of Correlation for the responses of learners and functionaries on the various statements pertaining to the critical areas of SBP. Values of correlation for all the statements are greater than +0.770, which reflect a positive high correlation between the responses of learners and functionaries. Thus, Null hypothesis is accepted, which states that “There is no significant difference between the

responses of Learners and Functionaries”; and alternate hypothesis has been rejected that states “There is significant difference between the responses of Learners and Functionaries”.

**Table 7. ANOVA between learner’s responses and functionaries’ responses for each Likert scale item**

Statements		Sum of Squares	df	Mean Square	F-value
Education centers are well constructed and well maintained	Between Groups	107.319	4	26.83	186.686
	Within Groups	22.563	157	0.144	
	Total	129.883	161		
Education center is conveniently accessible	Between Groups	156.661	4	39.165	537.324
	Within Groups	11.444	157	0.073	
	Total	168.105	161		
Class timing are convenient for learners	Between Groups	165.748	4	41.437	229.87
	Within Groups	28.301	157	0.18	
	Total	194.049	161		
All study materials and teaching materials are always adequately available	Between Groups	146.169	4	36.542	248.131
	Within Groups	23.121	157	0.147	
	Total	169.29	161		
The content of the material is relevant and useful	Between Groups	151.708	4	37.927	363.14
	Within Groups	16.397	157	0.104	
	Total	168.105	161		
Content should include messages on women empowerment	Between Groups	148.204	4	37.051	274.907
	Within Groups	21.16	157	0.135	
	Total	169.364	161		
Content must include more animated stories	Between Groups	145.101	4	36.275	287.091
	Within Groups	19.838	157	0.126	
	Total	164.938	161		
Learners attend classes regularly, without absenteeism	Between Groups	146.475	4	36.619	191.833
	Within Groups	29.969	157	0.191	
	Total	176.444	161		
Learners are able to retain education for longer period of time	Between Groups	157.525	4	39.381	193.624
	Within Groups	31.932	157	0.203	
	Total	189.457	161		
Adult Education should be driven through technology	Between Groups	117.835	4	29.459	176.767
	Within Groups	26.165	157	0.167	
	Total	144	161		
Adult education should contain skill development and professional development	Between Groups	116.762	4	29.19	173.724
	Within Groups	26.38	157	0.168	
	Total	143.142	161		
Adult Education should include general awareness of government policies	Between Groups	99.739	4	24.935	140.86
	Within Groups	27.792	157	0.177	
	Total	127.531	161		
Reward and recognition should be more expressive and frequent in nature	Between Groups	160.98	4	40.245	257.557
	Within Groups	24.532	157	0.156	
	Total	185.512	161		
Efforts of VTs and preraks must be recognised through reward, award and recognition	Between Groups	175.37	4	43.843	369.481
	Within Groups	18.63	157	0.119	
	Total	194	161		

It was observed for the research work that following problems may be enumerated pertaining to SBP in Uttarakhand:

- Lack of infrastructure
- Inadequate teaching and learning resources
- Content not aligned to economic needs of the learners

- Absence of comprehensive ICT in literacy program
- Literacy programs are void of skill development and personality development
- Lack of enough appreciation and recognition for learners and functionaries.

### Suggestions

Having highlighted the problems pertaining to SBP in Uttarakhand, following suggestions may be considered for improving the literacy program:

- Inclusion of technology in teaching and learning processes,
- Technology may be utilized for skill development and personality development
- Digital teaching and learning resources may resolve the insufficiency of the materials,
- Make learners and functionaries more participative for the objectives of the literacy programs
- A sound and expressive recognition culture may be adopted for appreciating learners as well as functionaries.

### 8. Conclusion

The evidence of the research explores that the learners and functionaries of the adult literacy program not satisfied with the existing framework of the program. Results of the survey suggested that learners are motivated enough to attend the program and functionaries are also interested in execution of the program but program is struggling with scarcity of the resources and unwanted delays in supplying of resources (Sharmila, 2018). The adult literacy programme needs to address the more important question of the learners, “what’s-in-it-for-me”. Education-occupation matching shows that earnings are affected by how individuals’ education matches that required by their occupation, the increase in earnings that occurs with a more beneficial education-occupation match (Quinn and Rubb, 2005). Establishing the link between literacy and economic activity of the learners will keep them motivated and improve retention level. Skill development lessons linked to literacy lessons may add plenty of value propositions for the learners. These issues can be handled by the use of technology, so it is pertinent to suggest an effective model of adult education that is executable, desirable, acceptable, functional, result oriented which can be monitored and tracked frequently. This research is also creating a future scope of more effective educational model of adult literacy.

The researcher experienced certain limitations while collecting data from respondents such as lack of willingness and geographical constraints that extended the time period of the planned research. Nevertheless, willingness of respondents especially learners was created to certain level by the help of functionaries.

The research paper provides a platform for the academicians to further explore the subject matter in other territories of the country. The research sets a benchmark to address the problems identified by devising a well-researched literacy model that includes ICT to be more effective and performance oriented.

## References

- Bhola, H. S. (1987). Adult literacy for development in India. In *National Literacy Campaigns* (pp. 245-267). Springer, Boston.
- Blunkett, D. (2000). Skills for life: the national strategy for improving adult literacy and numeracy skills: a statement. <https://dera.ioe.ac.uk/9941/>
- Govinda, R. (Ed.). (2002). *India education report*. Oxford University Press, New Delhi.
- Huang, H. M., & Liaw, S. S. (2018). An analysis of learners' intentions toward virtual reality learning based on constructivist and technology acceptance approaches. *The International Review of Research in Open and Distributed Learning*, 19(1), 91-115.
- King, K. (2011). Skills and education for all from Jomtien (1990) to the GMR of 2012: A policy history. *International Journal of Training Research*, 9(1-2), 16-34.
- Lind, A., & Johnston, A. (1990). Adult literacy in the third world: a review of objectives and strategies. (pp 275 - 298). ERIC Publishing.
- Padak, N. D., & Padak, G. M. (1991). What works: adult literacy program evaluation. *Journal of Reading*, 34(5), 374-379.
- Quinn, M. A., & Rubb, S. (2005). The importance of education-occupation matching in migration decisions. *Demography*, 42(1), 153-167.
- Saini, A. (2000). Literacy and empowerment: an Indian scenario. *Childhood Education*, 76(6), 381-384.
- Srivastava, K., & Patel, I. (2006). Community mobilisation, gender equality and resource mobilisation in adult education. *International Journal of Educational Development*, 26(2), 153-165.
- Thingbaijam, S. (2018). Importance of information and communication technology in the adult education programme. *Review Journal Philosophy & Social Science*, 44(1), 1-7.