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Factors Affecting Teachers' Practices in Implementation of Early Childhood Care and Education Curriculum in Public Schools

Abstract *The study was determined to find the factors that affect the teachers' practices in the implementation of the ECCE curriculum in public schools. The study was quantitative in nature, and a cross-sectional survey design was used. All the ECCE teachers in public schools formed the population of the study. The proportionate stratified random sampling technique was employed, and 278 teachers were selected as a sample of the study. The data were collected using the questionnaire on factors affecting teachers' practices in the implementation of the ECCE curriculum. The findings showed that there is a significant difference on the basis of experience as $p(0.000) \leq 0.05$ and an insignificant difference on the basis of qualification and class size as $p(0.000) > 0.05$. The study recommended that teacher training institutes of early childhood care and education should induct the curricula that are activity-based, and schools may provide better learning conditions in ECCE centers.*

Key Words: Teachers Practices, Curriculum Implementation, Early Childhood Care and Education

Introduction

Early childhood education is a unique and diversified arena that attends to the children from the time they are born till the age of eight years. In this time period, children try to participate in a diverse type of care and education situations and surroundings. National Curriculum of Early Childhood Education (NCECE) accommodates the requirement of restructuring the strategies to make a guideline for preparing activities and scheme of studies for preschoolers (age 04-05 years*) under the concept of developmentally appropriate practices for this tender aged schoolchild (Curriculum for ECCE, 2017).

The Early Childhood Care and Education (ECCE) Policy for Punjab (2017) invigorates and systematizes early learning provincially and incorporates clear guidelines for impartial and quality ECCE arrangement. The Government of Punjab perceives that institutionalizing and putting resources into ECCE can help accomplish its 2018 Education Goals, including improved admittance, value, learning results, and students retaining and transition. Arrangement of value ECCE additionally supports the Government of Punjab's work toward achieving Sustainable Development Goal (SDG) 4, that is, guaranteeing comprehensive and impartial quality training and advancing long-lasting learning openings for all. Target 4.2 of SDG4 is to guarantee that by 2030, all boys and girls have an approach towards quality early childhood development, care, and pre-primary education, so they are prepared for primary education (National Educational Policy, 2009).

An ECCE centres or changed over Katchi class, like conventional centres which support play-based learning in sophisticatedly created classes with prepared ECCE educators and guardians. This is at present offered in almost 3,000 chosen elementary schools across each of the 36 districts in Punjab. From these, the centres which were developed with the help of UNICEF were 900 and other 343 with help from Plan International Pakistan. Endeavors were in progress to arrive at a total aim of 10,000 ECCE centres by April 2018. In any case, the move from play-based learning in ECCE to

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book-based learning in Grades 1-3 keeps on being troublesome progress for children (Punjab ECE Policy, 2017)

All Education framework targets giving quality Education to their students. [UNESCO \(2006\)](#) declares that quite possibly the most deciding components that can ensure instruction quality is teachers' practices. [Adevemi \(2010\)](#) characterizes educator practices as the obligations performed by instructors at a specific period in the educational system to accomplish school objectives. [Nadeem \(2011\)](#) confirm that in all institutions, the practices of educators is one of the small bunch factors deciding school viability and learning result. The horrible showing and low enrolment are a portion of the inductions with respect to the acts of instructors.

[Akram \(2014\)](#) keeps on underlining that performance is an element of how factors, for example, students' characteristic, educator's characteristic and encouraging learning assets, interface in school climate. On the off chance that the communication is sound, the performance is in every case great; if not, the performance crumble. Pajare (2002) likewise sees that school assets and facilities could be a significant assurance to awful performance in schools.

This study utilized different pointers to evaluate the elements influencing teachers' practices in the implementation of ECCE curriculum, for example, student-teacher ratio, workload, instructional resources, teaching strategies, teaching attitude and administrative support. There is another training for the expert instructors, for example, known as Continuing Professional Development (CPD). It is the method by which experts keep up, improve and widen their insight and abilities and build up the individual characteristics and capabilities needed in their working lives. It is a cycle for setting yourself goals for advancement at that point, outlining your advancement towards accomplishing them. It is about where you need to be and how you intend to achieve it.

In Pakistan, the teaching practices in implementing the ECCE curriculum is ignored, and the factors that affect teaching practices are not studied in our context. However, teachers play a vital role in implementing the curriculum in schools. The factors that affect the teaching practices in ECCE cannot be overlooked. Therefore, this study provided an indication of factors that affects teachers' practices in the implementation of the ECCE curriculum.

Statement of the Problem

As Pakistan gears up to attain vision 2030, ECCE is seen as an important player in accelerating the achievements. The quality of a child's early learning experience makes a marked difference with regard to school preparation, participation, completion, and achievement. It is a well-known fact based on various studies that examined the direct and indirect effects of factors affecting the teaching practices that the learning and teaching process is affected by both direct and indirect factors. The teaching practices are also affected by the individual characteristics of teachers' along with the environmental factors that influence their integration in the classroom. The study, therefore, investigated the factors that affect teachers' practices in the implementation of the ECCE curriculum in public schools of the Lahore District.

Research Objectives

The objectives of the research were to:

- 1) Identify the factors affecting teachers' practices in the implementation of the ECCE curriculum in public schools of Lahore.
- 2) Differentiate the factors that affect teachers' practices in the implementation of the ECCE curriculum with respect to demographical variables (i.e., class strength, age, qualification and experience).

Research Methodology

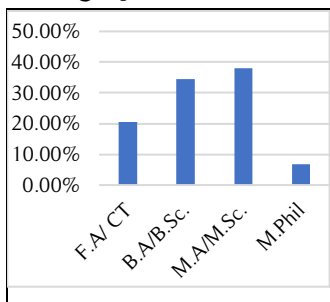
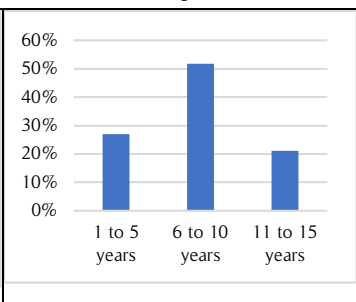
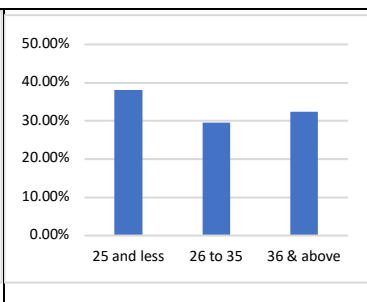
The study was quantitative in nature, and the positivist paradigm was adopted. A cross-sectional

survey design was used to investigate the teachers' perceptions about factors affecting their practices in the implementation of the ECCE curriculum in public schools. According to QAED (2019), there are a total of 876 public schools, 419 male public schools and 457 female public schools that have ECCE centres. The population exist in the proportion of 48% of boys' public schools and 52% of girls' public schools. The sample selected for this study were 278 teachers, as referred by Cochran (2007), by using a proportionate stratified random sampling technique.

For this study, the researcher used a questionnaire as a research instrument. The questionnaire was developed by the researcher to find out the factors that affect teachers' practices in the implementation of the ECCE curriculum in public schools of District Lahore. It consisted of two parts: the first included demographic (Class Strength, Qualification and Experience), and the second included eight factors affecting teachers' practices. There was a total of 45 statements, and each statement in the questionnaire was existed on a 5-point Likert type scale (from strongly agree to strongly disagree). The statements for the questionnaire were carefully chosen from different studies; though, the items were restated according to the contextual setting. The questionnaire was validated by two educational experts, and changes were incorporated. The Cronbach alpha was calculated for the factors, and the overall reliability of the questionnaire was .867.

Analysis of the study was in two parts: descriptive and inferential. Descriptive statistics were applied to summarize the result of demographic characteristics to explore the factors affecting teachers' practices, and inferential statistics (i.e., one-way ANOVA) was applied to differentiate the factors on the basis of demographic variables. Post Hoc test using Tuckey was applied to significant results among demographical groups, i.e., experience, class strength and qualification.

Demographic Characteristics of the Sample

		
<p>Figure 1: Percentage distribution of ECCE teachers Qualification</p>	<p>Figure 2: Percentage distribution of ECCE teaching experience.</p>	<p>Figure 3: Percentage distribution of ECCE class strength.</p>
<p>Figure 1 represents that ECCE teachers (38%) and (34%) had a qualification level of M. A/M.Sc and B.A/B.Sc whereas teachers having qualification level of FA/CT and MPhil are 21 % and 7%, respectively</p>	<p>Figure 2 displays that ECCE teachers'52% had 6 to 10 years of teaching experience, 27% had teaching experience of 1 to 5 years, and 21% had teaching experience of 11 to 15 years.</p>	<p>Figure 3 shows that ECCE classes (38%) have the strength of 25 and less and (33%) have the strength of 36 and above, and (29%) have class ranging from 26 to 35.</p>

Descriptive Statistics for Factors Affecting Teachers' Practices

This section provides the scores of mean and standard deviations of a questionnaire to measure factor affecting teachers' practices in the implementation of the ECCE curriculum. There were eight factors that are discussed in this section, and those factors are teacher-student ratio, workload, instructional

resources, teachers’ attitude, infrastructure and learning facilities, teacher-child relation, teacher-parent relation and administrative support.

Table 1. Descriptive Scores of Teachers Perception About Factors Affecting Teaching Practices in Implementation Of ECCE Curriculum.

Measures	Mean	S. D	Minimum	Maximum	SE	Variance
Teacher Student Ratio	3.81	.668	1.80	5.00	.04008	.446
Work Load	3.70	.651	1.67	5.00	.03909	.425
Instructional Resources	3.73	.622	2.00	5.00	.03736	.388
Teachers Attitude	3.53	.559	1.88	4.88	.03355	.313
Infrastructure and Learning Facilities	3.35	.737	1.50	5.00	.04425	.544
Teacher Child Relation	3.38	1.022	1.33	9.67	.06133	1.046
Teacher Parent Relation	3.34	.916	1.33	5.00	.05498	.840
Administrative Support	3.40	.730	1.60	5.00	.04380	.533

Table 1 portrays the scores of means and standard deviation regarding factor affecting teachers practices in the implementation of the ECCE curriculum. The table shows that the highest mean was of the factor “Teacher-Student Ratio” (3.81) which depicts that the student-teacher ratio affects teachers’ practices in the implementation of the ECCE curriculum. It shows that larger class size contributes to the low performance of teachers, and smaller classes allow more time for teachers to spend on skills which can increase learning. Whereas the lowest mean score was of the factor “Teacher Parent Relation” (3.34) that explains the parent-teacher relation has the minimum effect in the implementation of the ECCE curriculum. This shows that the relationship of parent and teacher is important for a regular progress report of children but not helpful in the implementation of the curriculum.

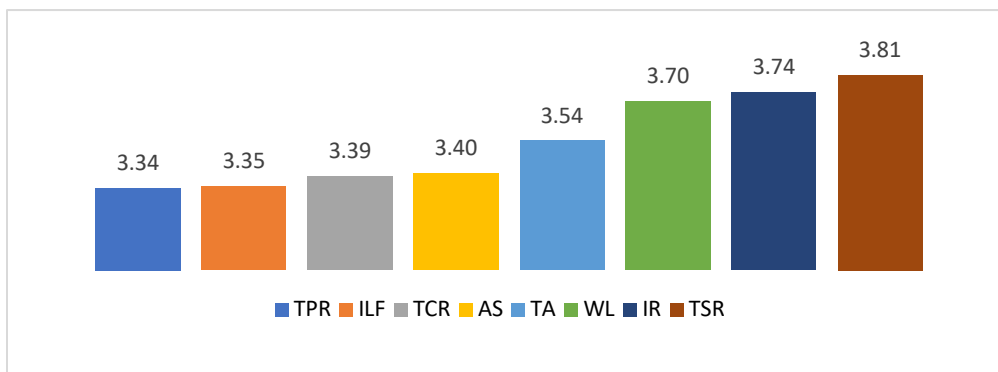


Figure 4: Ranking of Means Factors Affecting Teaching Practices

Figure 4, represents that teacher-student ratio has the highest means, i.e., 3.81. The lowest means among the factors is of teacher-parent relation i.e., 3.34.

Inferential Statistics for Factors Affecting Teachers’ Practices

This section compresses on the findings of inferential statistics i.e., one-way ANOVA to differentiate the factors that affects teachers’ practices in implementation of ECCE curriculum on the basis of demographical variable i.e., qualification, experience and class strength.

Table 2. One-Way ANOVA between Factors Affecting Teachers' Practices in Implementation of ECCE Curriculum Regarding Class Strength.

Variables	SS	MS	Df	F	Sig.
Teacher Student Ratio	.953	.318	3	.709	.547
	122.726	.448	274		
	123.678		277		
Work Load	1.341	.447	3	1.053	.370
	116.299	.424	274		
	117.640		277		
Instructional Resources	1.616	.539	3	1.394	.245
	105.893	.386	274		
	107.509		277		
Teachers Attitude	1.078	.359	3	1.150	.329
	85.619	.312	274		
	86.697		277		
Infrastructure and Learning Facilities	.270	.090	3	.164	.921
	150.534	.549	274		
	150.805		277		
Teacher Child Relation	8.371	2.790	3	2.718	.045
	281.301	1.027	274		
	289.673		277		
Teacher Parent Relation	6.347	2.116	3	2.560	.055
	226.412	.826	274		
	232.758		277		
Administrative Support	3.315	1.105	3	2.097	.101
	144.404	.527	274		
	147.719		277		

Class strength wise differences in teachers' perceptions about factors affecting teachers' practices in implementation of ECCE curriculum were investigated through one-way ANOVA. The result shows that there was insignificant difference in factors i.e., teacher-student ratio, work load, instructional resources, teachers' attitude, infrastructure and learning facilities and administrative support as $F(3, 274) = .709, p(.547) > 0.05$; $F(3, 274) = 1.053, p(.370) > 0.05$; $F(3, 274) = 1.394, p(.245) > 0.05$; $F(3, 274) = 1.150, p(.329) > 0.05$; $F(3, 274) = .164, p(.921) > 0.05$; $F(3, 274) = 2.097, p(.101)$ respectively.

The result shows that there was significant difference in factors i.e., teacher child relation and teacher parent relation as $F(3, 274) = 2.718, p(.045) \leq 0.05$; $F(3, 274) = 2.560, p(.055) \leq 0.05$.

Table 3. One-Way ANOVA between Factors Affecting Teachers' Practices in Implementation of ECCE Curriculum regarding Qualification.

Variables	SS	MS	Df	F	Sig.
Teacher Student Ratio	2.162	.721	3	1.625	.184
	121.516	.443	274		
	123.678		277		
Work Load	3.839	1.280	3	3.081	.028
	113.801	.415	274		
	117.640		277		
Instructional Resources	3.106	1.035	3	2.717	.045
	104.404	.381	274		

	107.509		277		
Teachers Attitude	.259	.086	3	.274	.844
	86.438	.315	274		
	86.697		277		
Infrastructure and Learning Facilities	.453	.151	3	.275	.843
	150.352	.549	274		
	150.805		277		
	2.782	.927	3	.886	.449
Teacher Child Relation	286.891	1.047	274		
	289.673		277		
	3.154	1.051	3	1.255	.290
Teacher Parent Relation	229.604	.838	274		
	232.758		277		
	.435	.145	3	.270	.847
Administrative Support	147.284	.538	274		
	147.719		277		

Qualification wise differences in teachers' perceptions about factors affecting teachers' practices in implementation of ECCE curriculum were investigated through one-way ANOVA. The result shows that there was insignificant difference in factors i.e., teacher-student ratio, teachers' attitude, infrastructure and learning facilities, teacher-child relation, teacher-parent relation and administrative support as $F(3, 274) = 1.625$, $p(.184) > 0.05$; $F(3, 274) = .274$, $p(.844) > 0.05$; $F(3, 274) = .275$, $p(.843) > 0.05$; $F(3, 274) = .886$, $p(.449) > 0.05$; $F(3, 274) = 1.255$, $p(.290) > 0.05$; $F(3, 274) = .270$, $p(.847) > 0.05$ respectively.

The result shows that there was significant difference in factors i.e., work load and instructional resources as $F(3, 274) = 3.081$, $p(.028) \leq 0.05$; $F(3, 274) = 2.717$, $p(.045) \leq 0.05$. For further pairwise comparison between factors Tuckey Post hoc test was applied. The results of the comparison are given below in the table:

Table 3 (a). Post Hoc Test Using Tuckey for Factor 'Work Load' Regarding Qualification

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Sig.
F.A/ CT	B.A/B.Sc.	-.02997	.992
	M.A/M.Sc.	.21243	.188
	M.Phil	.23684	.508
	F.A/ CT	.02997	.992
B.A/B.Sc.	M.A/M.Sc.	.24240*	.040
	M.Phil	.26681	.353
	F.A/ CT	-.21243	.188
M.A/M.Sc.	B.A/B.Sc.	-.24240*	.040
	M.Phil	.02441	.999
	F.A/ CT	-.23684	.508
M.Phil	B.A/B.Sc.	-.26681	.353
	M.A/M.Sc.	-.02441	.999

Note: * show significant difference at $\alpha = 0.05$

Table 3(a) shows the result for post hoc test using Tuckey for pairwise comparison of factor workload that affects teachers' practices among qualification. The result shows that factors workload was significant as $(p=.040) \leq 0.05$ between qualification levels B.A/B.Sc. and M.A/M.Sc.

Table 3 (b). Post Hoc Test Using Tuckey for Factor 'Instructional Resources' regarding Qualification

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Std. Error	Sig.
F.A/ CT	B.A/B.Sc.	-.16986	.10322	.355
	M.A/M.Sc.	-.26090*	.10139	.052
	M.Phil	.01170	.16352	1.000
B.A/B.Sc.	F.A/ CT	.16986	.10322	.355
	M.A/M.Sc.	-.09103	.08697	.722
	M.Phil	.18156	.15500	.645
M.A/M.Sc.	F.A/ CT	.26090*	.10139	.052
	B.A/B.Sc.	.09103	.08697	.722
	M.Phil	.27259	.15378	.289
M.Phil	F.A/ CT	-.01170	.16352	1.000
	B.A/B.Sc.	-.18156	.15500	.645
	M.A/M.Sc.	-.27259	.15378	.289

Note: * show significant difference at $\alpha = 0.05$

Table 3(b) shows the result for the post hoc test using Tuckey for pairwise comparison of factor instructional resources that affect teachers' practices among qualification. The result shows that factors workload was significant as $(p=.05) \leq 0.05$ between qualification levels F.A/ CT and M.A/M.Sc.

Table 4. One-Way ANOVA between factors affecting teachers' practices in the implementation of the ECCE curriculum regarding experience.

Measures	SS	MS	Df	F	Sig
Teacher Student Ratio	33.449	16.724	2	50.972	.000
	90.230	.328	275		
	123.678		277		
Work Load	30.701	15.351	2	48.556	.000
	86.939	.316	275		
	117.640		277		
Instructional Resources	10.690	5.345	2	15.181	.000
	96.819	.352	275		
	107.509		277		
Teachers Attitude	13.900	6.950	2	26.255	.000
	72.797	.265	275		
	86.697		277		
Infrastructure and Learning Facilities	10.101	5.050	2	9.871	.000
	140.704	.512	275		
	150.805		277		
Teacher Child Relation	20.650	10.325	2	10.555	.000
	269.022	.978	275		
	289.673		277		
Teacher Parent Relation	28.057	14.028	2	18.846	.000
	204.701	.744	275		
	232.758		277		
Administrative Support	21.607	10.803	2	23.558	.000
	126.112	.459	275		
	147.719		277		

Experience wise differences in teachers' perceptions about factors affecting teachers' practices in implementation of ECCE curriculum were investigated through one-way ANOVA. The result shows that there was a significant difference in factors i.e., teacher-student ratio, work load, instructional resources, teachers' attitude, infrastructure and learning facilities, teacher-child relation, teacher-parent relation and administrative support as $F(2, 275) = 50.972, p(.000) \leq 0.05$; $F(2, 275) = 48.556, p(.000) \leq 0.05$; $F(2, 275) = 15.181, p(.000) \leq 0.05$; $F(2, 275) = 26.255, p(.000) \leq 0.05$; $F(2, 275) = 9.871, p(.000) \leq 0.05$; $F(2, 275) = 10.555, p(.000) \leq 0.05$; $F(2, 275) = 18.846, p(.000) \leq 0.05$; $F(2, 275) = 23.558, p(.000) \leq 0.05$ respectively. For further pairwise comparison between factors Tuckey Post hoc test was applied. The results of comparison are given below in the table:

Table 5 (a). Post Hoc Test using Tuckey Among Experience

(I) exp	(J) exp	Mean Difference (I-J)	Std. Error	Sig.
1 to 5 years	6 to 10 years	-.49417	2.21362	.973
	11 to 15 years	-22.90554*	2.70513	.000
6 to 10 years	1 to 5 years	.49417	2.21362	.973
	11 to 15 years	-22.41137*	2.40289	.000
11 to 15 years	1 to 5 years	22.90554*	2.70513	.000
	6 to 10 years	22.41137*	2.40289	.000

Table 5 (a) shows the result for post hoc test using Tuckey for pairwise comparison of factor that affects teachers' practices among experience. The result shows a significant difference among groups ($p=.000, .000) \leq 0.05$ between 1 to 5 years and 11 to 15 years; 6 to 10 years and 11 to 15 years, respectively.

Discussion

This study supports the findings of other researchers (i.e., [Richardson, 2016](#); [Tobin & McRobbie, 2016](#)) that teacher's attitude has a significant impact on teaching practices and curricular implementations. Although attitude is clearly a driving factor in the implementation of a curriculum, this is a complex issue with many factors at work. [Meenakshi \(2008\)](#) argues that learning is affected by the attitude and motivation of teachers. If a teacher has a positive attitude toward his or her subject, learning occurs easily.

[White Paper on Educational Development \(1980\)](#) noted that small classes were a positive feature of special schools and that the reduction in the pupil-teacher ratio in previous years had helped ordinary schools to provide an appropriate educational service for pupils. The STAR project that is implemented by the Tennessee State Department and the CSPAR project, which is done in the United Kingdom, are significant studies that show the importance of class size on teachers' practices. The study findings considered teacher-student interaction as an important aspect of a good education ([Graue, Rauscher & Sherfinski, 2009](#)). Some research findings show the effects of workload on ECCE quality, indicating that practitioners with a heavy workload perform less well than colleagues with lighter schedules ([De Schipper et al., 2007](#)).

Conclusion

On the basis of findings, the study described that there are different factors that are affecting the practices of teachers. The results of the study have shown that the factors affecting the implementation of the ECCE curriculum are: lack of adequate preparation of teachers, inadequate teaching-learning resources. Teachers also reported that although the training skills they obtained from the college exposed them to a variety of teaching methods, updating them through seminars and workshops would empower their delivery approaches better, but they have not been given an opportunity to do so. Hence, teachers were not adequately empowered for the implementation of the

ECCE curriculum. The research, therefore, concludes that ECCE school teachers lack frequent refresher courses to cultivate the various skills with respect to children's activities and teaching methods. The majority of the teachers said that the factors, i.e., teacher-student ratio, workload, instructional resources, teachers' attitude, infrastructure and learning facilities, teacher-child relation, teacher-parent relation and administrative support, are affecting their teaching practices. The results showed that the factors teacher-student ratio affects the teachers' efficient practices as over-crowded classes lower the teachers' morale. Similarly, the factors of teachers' attitude, instructional resources and workload also affect the teachers' practices, and it was conveyed that the teachers who were not prepared did not perform any group activity in class, and they did not teach anything through role play. The teachers' attitude was the foremost factor that affects teaching practices.

The respondents showed that the majority of the teachers agreed that most factors affect the teachers' practices on the basis of experience. But the results also concluded that there was a difference in factors (i.e., teacher-student ratio, teachers' attitude, infrastructure and learning facilities, teacher-child relation, teacher-parent relation and administrative support), and there was not any difference in factors, i.e., workload and instructional resources on the basis of qualification.

Similarly, the result also showed that there was a difference in factors (i.e., workload, instructional resources, teachers' attitude, infrastructure and learning facilities, and administrative support), and there was not any difference in factors (i.e., teacher-student ratio, teacher-child relation and teacher-parent relation) on the basis of strength.

Recommendations

Following recommendations were made on the basis of findings.

1. Teachers may be provided with continuous professional development that they may be able to cope with the emerging need of integrating knowledge with modern demands.
2. School administration may provide better learning conditions in ECCE centres by accelerating the program of providing appropriate infrastructure and instructional resources.
3. School heads and management may plan to conduct sessions for ECCE teachers where they analyze the document of NC for ECCE to be incorporated in their lesson plans to promote children's holistic development.
4. The key learning areas of ECCE centres may be equipped with sufficient material according to the strength of the class.
5. The teacher training institutes of early childhood care and education should induct the curricula that are activity based.

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