

## Assessment of Preschoolers' Metacognitive and Critical Thinking Skills through Authentic Material

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### Abstract

*Authentic material is very helpful for growth and develop the metacognitive development of preschoolers. It makes the provision of safe and stimulating learning environment creates safe provision and highly significant involvement occurred in cognitive development of preschoolers. To check the authentic material improved Metacognitive Thinking Skills of preschoolers. The subsequent mix-method approach used to explore the effectiveness of using authentic material in the form of flashcard, learning material and preschool learners' kits which had a verity of educational supportive things. Government Municipal Model Girls High school selected for data collection. All the 25 preschoolers of ECE/Prenursery class selected for manipulate data. The questionnaire was consisted nine domains to assess the cognitive development of preschoolers. It was concluded that authentic material and role of involvement of preschool or ECE teacher helpful to develop and enhance the metacognitive improvement. It is recommended to teachers implement flashcards and other authentic material for longer and more concentrated time that proves a sophisticated level of effectiveness.*

**Keywords:** Preschoolers, Metacognitive Development, Thinking Skills, Helping Material

### Introduction

The basic and principal ideas of mental advancement include how we think and gain information. It includes inspecting learning, memory, dangerous abilities, and knowledge. Mental scholars might need to comprehend how critical thinking changes over the course of growing up, what social contrasts mean for the manner in which we opinion our own scholastic accomplishments, advanced language, more considerably. Jean Piaget speculated that there are four steps of cognitive development (Feldman 2010). The very first step is a sensory-motor. According to this stage around two years of age ordinarily goes on until a youngster. A child examines the world through his perceives: taste, contact, sight, sound, and smell. A child fosters a mindfulness that things and individuals exist in any event, when the kid isn't there. For instance, toward the fruition of this stage, a kid knows that his toys are still in the parlor, in any event, he can't see them when he is in his room. A kid likewise fosters a few coordinated movements during this time. In any case, youngsters ordinarily have no comprehension of emblematic portrayal. The last three phases are functional stages. From age two to seven normally endures, when a youngster starts and keeps on creating language and thinking abilities preoperational stage happens,. The youngsters become zeroed in on themselves and improved how the world connects with them. The substantial functional stage typically happens between the ages of seven and twelve. A kid starts to see the world comparable to other people during the substantial functional stage. Youngsters additionally start to foster sensible reasoning; they start to comprehend that how items are set doesn't up have anything to do with how much an article. The last phase of Piaget's hypothesis is known formal functional stage. The formal functional stage starts from twelve age and endures all through grown-up

lives. Reasoning creates during this stage both coherent and conceptual. Through them, during each stage the youngster gain valuable encounters and increment in insight. Piaget likewise accepted that a youngster who hadn't finished specific formative stages couldn't gain things from higher formative stages. For instance, a youngster has not learned language couldn't think legitimately. View on mental turn of events had one more, according (Lev Vygotsky 1962). He accepted that gaining was passed down from one age to another; that it was a consequence of directed social connections where kids worked with their friends and a coach to tackle issues and that mental improvement must be perceived on the off chance that social and social setting are considered. He accepted that children could not think until they know and grasp on language. Vygotsky the Zone of Proximal Turn of events, concocted characterized distinction between the formative level of a kid and the formative level a youngster could reach the perfect proportion of direction. He termed this direction a platform accepted that educators ought to encourage learning, autonomy, and development among understudies (Favoring 2011).

Piaget and Vygotsky introduced contradicting convictions impacting the act of instructors. From one perspective, Piaget accepted that kids have the opportunity to investigate and develop information through their own cooperation in their learning; and then again, Vygotsky accepted that grown-up direction and backing was fundamental in helping youngsters to arrive at higher reasonable comprehension supported that youngsters' opportunity ought to be sustained with educator direction inside a majority rule learning climate educator understanding is a significant property in coordinating the states of the encounters of the juvenile. Smart choices in regards to youngsters' learning includes the teacher having profound comprehension of content, information on kids as students, and the demeanor to apply these experiences in manners decide how best to start and support communication with understudies. The idea of the unique connection among youngsters, instructors and content Current exploration dodges the misleading division of kid focused or educator guided ways to deal with one that investigates.

"Early schooling and care encounters and mental abilities improvement" Rebekah Levine Coley (1993). To figure out the effect of early instruction and care on mental turn of events and school progress of kids, examination utilizes broadly delegate longitudinal birth accomplice reviewed from Australia and the US. This finding of the review displays that EEC happenstances advance the mental abilities fundamental for youngsters' prosperity at school. It helps in advancing kids' status for school beginning perusing and math's abilities by supporting development and growth early mental abilities in center, like language understanding and creation. These abilities, thus, assist preschoolers with effectively progressing into and adornment in proper school settings. This Exploration proposes that pre-essential training is vital for improvement kids before they enter in formal school. In mental advancement it helps kids at the early grades of essential training, when they enter elementary school it has solid bearing on participation and support of youngsters. The main reason for essential training is to plan kids truly, inwardly, socially and intellectually for formal tutoring and to forestall lackluster showing. Tuition based schools exist since guardians accept that they give better nature of youth training than the public authority schools. It was likewise found that in huge the elements connected with guardians' decision and government schools' accessibility affect variety in tuition-based school enlistment than factors connected with private arrangement directed a concentrate on "A Superior Beginning Why Homeroom Variety Matters in Early Schooling" (Jeanne 2015). Somewhat recently youth improvement and schooling such a lot of consideration. With the appearance of neuro imaging, cerebrum pliancy has become obvious as

the significance of catching and forward-moving the possible intrinsic in the earliest long stretches of life.

### **Statement of the Problem**

The Government of Punjab is committed to keep on track to achieving SDGs by providing a preschooler learning environment at public schools. However, the Government schools are facing severe criticism for providing conducive learning environment, quality education and developing critical thinking among the children. Government Schools are also blamed for inadequacy of facilities, materials and teaching aid. Further, these authentic materials include the pictures, photos, videos/animations, and visual aid to help the educators to involve preschoolers through attractive activities. English instructors play a significant part to invigorate and rouse them securing new jargon and they are liable for making the class atmosphere developed enjoyable.

### **Objectives of the Study**

1. To analyze the sources of authentic material which are daily used by preschoolers.
2. To check the authentic material improved Metacognitive Thinking Skills of preschoolers.
3. To what extent Metacognitive Thinking Skills improved students' vocabulary at primary level.

### **Research Questions of the Study**

1. What are the sources of authentic material which are daily used by preschoolers?
2. How do authentic materials improve Metacognitive Thinking Skills?
3. How are students improved through vocabulary at primary level?

### **Significance of the Study**

Metacognitive thinking skills helped the preschoolers to improve vocabulary. Vocabulary is one of the essential aspects of learning especially Languages. To be able to communicate in English, vocabulary is needed and it is important to improve and have a variety of vocabular. Without sufficient vocabulary, everyone feels difficult to interconnect and communicate with others, expressing their ideas or opinion, comprehending simple text, and listening of instructions. As Viera (2018) said that, "Vocabulary knowledge is viewed and observed as an essential tool for mastering any language skills. It also contributes to the understanding of written and spoken texts." Grasping and Mastering vocabulary is not easy for the students, especially for Indonesian students where English is considered as a foreign language. According to Mthethwa (2018), the use of a combination and amalgamation of text, sound, graphics, video, or animation to teach vocabulary is becoming a common aspect of instructional practice in language learning. It will make it easier for students to learn vocabulary in a fun way.

### **Delimitation of the Study**

The study was delimited to Municipal Model Girls High School City Gujrat. It was case study; therefore, all the students of these schools were part of study. This school is full furnished with all basic facilities which are compulsory for learning students.

### **Literature Review**

This section of the study presents the review of the related studies and previous studies to find out the research gap.

### **Metacognitive Skills Development**

Different investigations have likewise shown that offspring of year and a half as of now utilize unconstrained methodologies to address their slip-ups during critical thinking (DeLoache et al., 1985). At 3 years, youngsters can screen their critical thinking conduct and at 4 years of

involving metacognitive handling and treatment in puzzle errands (Sperling et al., 2000). Hence, there are different examinations that show that, particularly from 3 to 5 years old, youngsters show a significant advancement in their metacognitive capabilities. Youngsters are fit for tackling their concerns. They show various approaches to arranging, observing, and assessment to do as such, having the option to screen their conduct through various methodologies (remarks coordinated toward themselves, really looking at ways of behaving and mistake recognition, conduct redundancy to confirm the exactness of the outcome, utilization of motions to help their action) and lay out conduct assessment including appraisal of execution quality itself and assessment when the undertaking has been finished. To put it plainly, the logical proof permits to assert that the way of behaving of youngsters previously throughout the primary years of life and during kindergarten years uncovers fundamental types of arranging, checking and assessment (Roebbers, 2017). Be that as it may, contrasts in the implementation of metacognitive abilities among youngsters can be noticed, which shows the presence of various improvement rhythms of their metacognitive abilities. A few kids may not precipitously secure able metacognitive abilities. Veenman (2013) brought up that those kids who have metacognitive abilities available to them however neglect to create them properly can be helped by straightforward signals and updates, given by the actual setting (for instance, update banners) or by the school personnel. In any case, kids who don't have metacognitive abilities may not profit from basic signs and updates, but rather can profit from the impacts of a particular further educating and mediation, considering that metacognitive abilities are changeable and practicable even in first ages (Chatzipanteli et al., 2014).

### **Metacognitive Skills Assessment**

A significant issue in the evaluation advancement of early metacognitive abilities as well as in their mediation recommendations is to take care of the qualities of the undertakings that the youngster should tackle, on the grounds that metacognitive abilities are exceptionally at these early ages subject to the unique circumstance. Accordingly, it is fundamental that kids are offered the chance to send off their metacognitive abilities by giving significant undertakings to them, or at least, to fit their inclinations and level of considerate and understanding... It was unequivocally strategic inquiries connected with the undertakings utilized during years in metacognitive expertise research for youngsters (other than hypothetical issues) that made these early abilities misjudged and, surprisingly, denied, certifying that metacognitive abilities started to arise at around 8-10 years. Ongoing examination has permitted us to dismiss that position, permitting us to infer that the qualities of the instruments and tests utilized for their evaluation misjudged these youngsters' capacities by requiring a high verbal part, being that their phonetic improvement doesn't need to be at a similar level as their metacognitive turn of events (Whitebread et al., 2010). The unpredictable utilization of self-report devices and lab studies with adolescents to evaluate metacognitive abilities has additionally been scrutinized and analyzed by specialists. Current examinations utilizing an observational approach, where youngsters are concentrated on in their own constant setting and their free, normal and unconstrained way of behaving is regarded (without fundamentally requiring express verbal reaction) have permitted to realize that as of now at preschool ages, kids

### **Authentic Materials and Authenticity**

As per Morrow (1977), it had been challenging for scholars to settle on a denotation of the term's credibility, legitimate materials, and genuine language had been used in language education terms. The intricacy of this indiscretion lies in the various regions in which the term realness falls, and the members are involved. As per Mishan (2005), the idea of legitimacy in

language advancing over the entire course of time has tumbled into three separate gatherings: open methodologies, materials centered approaches, and humanistic methodologies.

The open methodology has presented reliability as the need to communicate, which surmises an accentuation on importance as opposed to on frame. The materials centered approach permitted the execution of different methodologies in opposition to this, for example, the academic methodology, which comprised in separating words into their constituent parts, and the inductive methodology, by which peruses gather sentence construction rules out of credible messages. At last, the humanistic methodology sees the student all in all where everything the physical collection of the cerebrum is compulsory. It is apparent that how the term credibility has been perceived and applied in the hunt of achieving that extreme objective which is communicated. With respect to the job of factual materials in the language homeroom, (Support 2000) concur that they are not created for language showing purposes and don't have "imagined or worked on language." In this means, papers, magazines, recordings, or guides are clear instances of genuine materials. In any case, Morrow (1977) goes additional and assurances that "a valid message is an elasticity of genuine language, created by a genuine speaker or essayist for a genuine crowd and intended to pass on a genuine message or the like". This later definition unquestionably supplements the idea that language genuineness and valid materials ought to be perceived inside the unfamiliar/second language learning setting as any sort of spoken or composed act which contains no follows or indications of language showing intercession, and rises up out of the maker's own most memorable culture, language, and requirements for correspondence.

### **Research Methodology**

The type of research is qualitative but the researcher analyzed the collected data into quantitative in showing the frequency and percentage. A subsequent mix-method approach was used to explore the effectiveness of using authentic material in the form of flashcard, learning material and Early Childhood Educational kits which has a verity of educational supportive things. The researcher got different results from the students of play class which is entitled ECE (Early Childhood Education). Metacognitive Thinking Skills improved at primary level learners of Public Sector School in City Gujrat. Data collection was vital part of the research, for which different means had been used. Following methods of data collection adopted.

### **Research Tools**

The researcher constructed the questionnaire consisted nine domains to assess the cognitive development of preschoolers (Tomar et.al, 2017). The nine domains are:

**Conceptual skills:** The researcher observed the preschoolers through observation for getting the conceptual understanding with the help of asking about name of images in books, charts and flash cards. The researcher collected data through showing and then asking about the images of books, school charts or other material of classroom especially play-class things. The researcher gave the marks according to response of preschooler in order to check the achievement of preschoolers.

**Information:** The researcher observed the cognitive development of preschoolers through get information only requiring name of family members and teacher. The researcher gathered personal information from pre-schoolers like, name of family members and the community of school. Maximum five name of members, school faculty, name of city and living place. The researcher asked to get information from preschoolers to check mental level and cognitive development. The researcher asked five numbers from following points and gave number in response.



**Comprehension:** The researcher put different things front of preschoolers and researcher observed and got information about the cognition development. The researcher assembled information from children by oral speaking and they chose things which were pointed by researcher present in school or class which were familiar to preschooler. The researcher gave the marks on their achievements in observed data.

**Visual Perception:** Visual cognition development is observed through showing the visual components. LCD is present in class. The researcher accumulated information from children asking visual information from the children by watching LCD which was hung in the class. The researcher collected the data regarding cognitive development and basic learning of preschoolers. The researcher asked the maximum five things from video to check the cognition improvement of preschoolers and gave maximum five number in their achievement in the shape of response.

**Memory of Preschoolers:** At this level memory is not developed but according to this level of mental cognition the researcher observed the preschoolers asking different simple questions. The researcher hoarded evidence from children by inquiring the past events which were celebrated with teachers and family members. The researcher also asked the preschoolers about the different events which are linked with past or present. Metacognitive development of preschoolers related to stored memories and realization.

**Object vocabulary of Preschoolers:** The researcher stockpiled and gathered from preschoolers by showing different things in bag, Math corner, English corner, Urdu corner, different types of toys which class had kept. Whole authentic material improved cognitive development which showed a positive role in improving mental ability of preschoolers. (Any 5 things listened from every student)

**Productive Knowledge about English Alphabet of Preschoolers:** Productive information and knowledge relates to words which the learners understand and are able to pronounce correctly and use constructively in speaking and writing 5 letters of English Alphabets were listened from every student, with the reference of flash cards and other educational material. To check the accuracy in response of preschooler’s researcher asked five elements in shape of flash card and other supportive material and gave marks according to their consequence.

**Speaking Competency:** The researcher did conversation with every child to check competency through basic sentences. The researcher spoke different simple questions to check the speaking competency from preschoolers.

Following questions were asked to preschoolers to check the speaking competency.

What is your name?

In which class do you read?

What is name of your school?

What is the name of your city?

What is the name of your country?

**Listening Competency:** The researcher observed the listening competency through listening and response with the help of simple sentences. The questions were same which were asked to check the speaking competency from the preschoolers.

**Table 1:** Domains of Metacognitive Development

Serial No	Name of Domain	Name of Source	Achievement Score
1	Conceptual Skills	Images of Books	1 to 5
2	Information (family)	Name of family and other	1 to 5

3	Comprehension	Use of Flash Cards	1 to 5
4	Visual Perception	Use LCD Videos	1 to 5
5	Memory of Preschoolers	Asked About Past Events	1 to 5
6	Object Vocabulary	Class Learning Material	1 to 5
7	Productive Knowledge	Match Alphabets with Objects	1 to 5
8	Speaking Competency	Conversation Preschoolers	with Lickert Scale
9	Listening Competency	Conversation Preschoolers	with Lickert Scale

### Research Design

The mixed method adopted as research design. The researcher selected play class which was entitled ECE (Early Childhood Education) 25 students from Municipal Model Girls High School. The researcher managed whole material which was helpful for learning to Metacognitive Thinking Skills at primary level by using flashcard and other learning material during teaching. The researcher executed and manipulated developed questionnaire in different domain. The researcher collected data in different domain personally with the help of class teacher.

### Population of the Study

The population of the study was primary level ECE (Early Childhood Education) students of all Public Schools in City Gujrat. Specifically, preschoolers entitled ECE class.

### Sampling Techniques of the Study

The researcher selected whole class consisted 25 male and female students from Municipal Model Girls High School where at primary level girls and boys are co-educated preschoolers age 3 to 5 years.

### Data Collection

Data collected from the selected sample through constructed questionnaire. Data collected by the researcher himself through questionnaire which was consisted the different domains of cognitive development with the help of flash card learning material which was kept in class. The researcher observed the preschoolers through different domain of learnings. The teacher interacted the preschoolers' different domains like flashcards, communication, different educational activities of class where all the students directly and indirectly involved. The researcher keenly observed the students and collected data.

### Data Analysis and Discussion

This chapter deals with the collection and analyzing of data. The researcher presented the results in tables and graphs. The results also be discussed in this chapter and a summary of the chapter will be written at the end of this chapter. Data collected using above mentioned method then after tabulation the data will be analyzed through SPSS version 25. Data were qualitative in nature then transform data in quantitative. Statistical measures of frequency and percentage will be used to analyze data. First of all, data was entered in SPSS by the researcher himself. After this it will be verified to eliminate the errors. First section was comprised having frequency, second part contained percentage and last one comprised cumulative percentage. At the end of every statement the reasonable solution of the challenge and problem is suggested. The main challenge as consider with the reference to cognitive learning at pre-formal education was discussed and narrated through a strong assumption.

All the target statements are put under specific research question analyzed in qualitative nature. The responses analyzed data in quantitative manners to show a comprehensive result, clear analysis and inclusive consequence.

**Table 2: Gender (Preschoolers)**

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	17	68.0%	68.0	68.0
Female	8	32.0%	32.0	100.0
Total	25	100.0		

In this study the sampled students there were 25 preschoolers. In which majority of preschoolers were male where 68% and minority were female 32% enrolled in school. It showed that male preschoolers were maximum in numbers and female preschoolers were minimum in numbers.

In city Gujrat Municipal Model High School for Girls have low number of preschoolers and in Boys section the strength of male students was higher. At first stage male were most conscious to join school for getting education as compare to female. It showed that tendency of getting admission in school about male is big and joining in school about female the propensity is low.

**Table 3: Age of Preschoolers**

Ages of Preschoolers	Frequency	Percent	Valid Percent	Cumulative Percent
Above 3 Years	11	40.7%	44.0	44.0
Above 4 Years	11	40.7%	44.0	88.0
Above 5 Years	3	11.1%	12.0	100.0
Total	25	100.0		

In this study the sampled preschoolers there were 11 students 40% in 3 years age who got admission in school. It showed that maximum numbers of preschoolers were conscious to join the school. It also showed big advancement in choosing the educational institutions for getting conventional education. When it was also analyzed second stage of preschoolers which showed that maximum numbers of preschoolers joined the school at 4 years age in which showed that 11 preschoolers 40%. Maximum numbers of preschoolers in which ages were 3 years and 4 years joined the conventional education school system. A very low number of preschoolers joined the school in which showed 3 students where as 20% was part of sample.

**Table 4: Schooling Period of Preschoolers**

Learning Duration	Frequency	Percent	Valid Percent	Cumulative Percent
3Months	2	7.4	8.0%	8.0
4Months	4	14.8	16.0%	24.0
5Months	12	44.4	48.0%	72.0
6Months	7	25.9	28.0%	100.0
Total	25		100%	

In this table the period of preschoolers is analyzed, as which is showed in above that maximum number of preschoolers were indulged 5 Months in getting basic learners whereas 12



preschoolers were part of study. In second 7 preschoolers' students were learning basic knowledge of learning at schooling. At third, there were 4 preschoolers were attaining the education at first level. There was significance difference among the preschoolers who were attraction with learning process. At fourth level, there was an only 2 students who got admission in school level. It was observed that a big number of preschoolers were interacting the basic knowledge learning process. An average level of preschoolers exhibited a comprehensive performance in attaining learning process.

**Table 5: Observation Name of Things Kept in Bag**

Grading	Frequency	Percent	Valid Percent	Cumulative Percent
A	14	51.9	56.0	56.0
B	8	29.6	32.0	88.0
C	3	11.1	12.0	100.0
Total	25		100.0	

Before performing the intervention, the researcher observed the knowledge of bag kept material to find out cognitive development of preschoolers after the data was collected, data analysis was performed to obtain the results of treatment. The obtained data were observation about the things which were used by students daily during learning process like book, pencil, sharpener, rubber, lunch box geometry box notebook and conventional books etc. analyzed in quantitatively whereas frequency and percentage to show the strength of presenting data. Furthermore, the data were classified based in grading A, B and C to show best and classification of results. In addition, the researcher observed the cognitive development of preschoolers in second language.

**Table 6: Identification of any five things Present in Class**

	Frequency	Percent	Valid Percent	Cumulative Percent
A	14	51.9	56.0%	56.0
B	10	37.0	40.0%	96.0
C	1	3.7	4.0%	100.0
Total	25		100%	

The researcher observed the knowledge about the substantial things of class like chair, table, desk, whiteboard, marker, chart, duster etc. to find out cognitive and reasoning development of preschoolers after the data was collected, and data analysis was achieved to obtain the results in showing the frequency and percentage. The researcher collected the data, after asking any five things in class to find out the cognitive and learning strength of preschoolers. Maximum number of students whereas 14 preschoolers which was showed in percentage was 56% responded. It was showed that a comprehensive number of preschoolers got good knowledge about whole things presented in class who interacted during attending classes which is showed that atmosphere equipped with things and helping material played a vital role in improving vocabulary as well as source of conversation and language.

**Table 7: Visual Identification of Preschoolers**

Score in Grades	Frequency	Percent	Valid Percent	Cumulative Percent
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A	10	37.0	40.0%	40.0
B	7	25.9	28.0%	68.0
B	7	25.9	28.0%	96.0
C	1	3.7	4.0%	100.0
Total	25		100%	

Based on children involvement to participate in the learning process Reggio-Emilia Approach method has begun to be well-known since the 1960s in Italy. Teaching activity is focused on the length of the child's learning period through exploration of an object and children fulfil their curiosity and interest about the object to the maximum. Children were trained to observe things based on learning plans and planned time. Due to this researcher collected data through observation from preschoolers using LCD which is installed in play class showing pictures of animals, birds, fruits, vegetables and other popular utensils consisted in home, whereas only 10 preschoolers responded which showed percentage was 40%, at second and third 7,7 preschoolers responded percentage is 28%. Only one preschooler was not in position to respond favorably.

**Table 8: Memory of Preschoolers**

Score in Grades	Frequency	Percent	Valid Percent	Cumulative Percent
A	13	48.1.0	52.0%	52.0
B	7	25.9	28.0%	80.0
C	4	14.8	16.0%	96.0
D	1	3.7	4.0%	100.0
Total	25		100%	

Cognitive development has been defined as “the recall or recognition of knowledge and development of intellectual abilities and skill. Based on this the researcher collected data from the preschoolers asking simple questions related to past and future to check the memory development. After collected data from preschoolers it was analyzed that 13 number of students responded and showed 52%. At second level 7 preschoolers answered favorable and got 28%. At third level 4 preschoolers replied which is 16%. After whole analysis it was concluded that maximum number of preschoolers gave reasonable response to showing past and future memory.

**Table 9: Vocabulary of Preschoolers**

Score in Grades	Frequency	Percent	Valid Percent	Cumulative Percent
A	16	59.3	64.0%	64.0
B	6	22.2	24.0%	88.0
D	2	7.4	8.0%	96.0
C	1	3.7	4.0%	100.0
Total	25		100%	

**Table 10: Productive Knowledge about English Alphabet of Preschoolers**

Score in Grades	Frequency	Percent	Valid Percent	Cumulative Percent
A	14	51.9	56.0%	56.0
B	8	29.6	32.0%	88.0
C	3	11.1	12.0%	100.0
Total	25		100%	

Grounded on this technique the researcher collected data from the preschoolers with the help of English alphabets. The researcher collected data from preschoolers through observation using English flash cards to know identification of English alphabets linked with images and objects. When data was analyzed, after data collected 14 preschoolers responded and got 56% which was maximum students who showed a good cognitive development. When data analyzed at second level it was showed that 8 preschoolers answered and got 32% score on B level. At third level C 3 preschoolers responded only 12% score. Flash cards were very helpful for improving basic knowledge about the English language which improved cognitive development of preschoolers.

**Table 11:** *Speaking Competency of Preschoolers*

<i>Speaking</i>	Frequency	Percent	Valid Percent	Cumulative Percent
Quickly Complete Response in Speaking	8	29.6	32.0%	32.0
Quickly In-complete Response in Speaking	6	22.2	24.0%	56.0
Slowly Response in Speaking	10	37.0	40.0%	96.0
Confused Response in Speaking	1	3.7	4.0%	4.0
No Response	0	0	0	0
Total	25		100.0%	100

Speaking of preschoolers is very comprehensive because at this stage if preschoolers respond at favorable it concluded that cognitive development smoothly achieved. The researcher got respond through doing simple conversations so that cognitive development observed. After collection data it was analyzed that 8 preschoolers responded quickly 32% when researcher did any type of question at this level. At second category 6 preschoolers replied in-complete 24% by detected method of researcher. Maximum number of preschoolers replied slowly in speaking where 10 preschoolers 40% whereas it was concluded at this level preschoolers did not quickly respond. At fourth level only one student confused response.

**Table 12:** *Listening Competency of Preschoolers*

	Frequency	Percent	Valid Percent	Cumulative Percent
Quickly Complete Response in Listening	11	40.7	44.0%	44.0
Quickly In-complete Response in Listening	11	40.7	44.0%	88.0
Slowly Response in Listening	3	11.1	12.0%	100.0
Total	25		100.0%	

Listening of preschoolers was analyzed where minimum number of students showed that 11 who responded very quickly 44%. At second level preschoolers responded in-complete in listening. Listening is input element of language so that this technique is dominate because after listening language progressed. So 11 preschoolers also responded in-complete to

researcher which is also 44% score achieved. At third level a very low number of preschoolers who slowly respond. It was analyzed that maximum number of preschoolers respond reasonably which was either complete or in-complete but respond a good response.

**Table 13: Statistical Summary**

	Mean	Std. Deviation	Minimum	Maximum
Gender	1.3200	.47610	1.00	2.00
Age	1.6800	.69041	1.00	3.00
Schooling of Preschoolers	2.9600	.88882	1.00	4.00
1. Conceptual Skills	4.4400	.71181	3.00	5.00
2. Information (family)	7.2000	1.82574	2.00	10.00
3. Comprehension	4.5200	.58595	3.00	5.00
4. Visual Perception	4.0400	.93452	2.00	5.00
5. Memory of Preschoolers	4.2800	.89069	2.00	5.00
6. Object Vocabulary	4.4400	.91652	2.00	5.00
7. Productive Knowledge	4.2400	.92556	3.00	5.00
8. Speaking Competency	2.8400	.94340	1.00	4.00
9. Listening Competency	3.3200	.69041	2.00	4.00

### Conclusion and Recommendations

1. After analysis and conclusions, showed that frequency and percentage score of variable gender, there were 25 preschoolers got admission in school. There were 25 preschoolers' students in the study. In which majority of preschoolers were male maximum where is 68% and a very low number of preschoolers and students were female 32% enrolled in school. It was showed that in Gujrat Municipal Model High School for Girls maximum male preschoolers got admission in institution. The ration between male and female is significance difference. It also showed that male was actively joined the school.
2. From supposition and conclusions in second variable schooling period with the reference of ages of preschoolers was showed high at low age. Maximum numbers of preschoolers were conscious to join the school at low age whereas 3 years toddlers and 4 years preschoolers. It showed also consequence that male was most conscious and cognizant to learning and studying. Naturally power and supremacy of mind for learning new things in new horizon.
3. Concluding and consequence of variable understanding about the knowledge of bag material which were used by pre-schoolers. Ater observing it was significance improved the mental improved in knowing the whole things which were kept in bag. It showed that maximum number of students very well know about the whole things because they interacted daily during the school period as well as doing home assignments. These little things like book, pencil, sharpener, rubber, lunch box geometry box notebook and conventional books etc enhance second language vocabulary and developed the cognitive learning process.
4. Founded that the pre-schoolers got information about whole things kept in class. It showed that pre-schoolers improved cognitive development through knowing the things in class like chairs, table, benches, cupboard, whiteboard, duster, marker etc. which were used to in the class during learning process. Maximum number of pre-schoolers

knew about the following things and material. These things are part of improving vocabulary and enhanced the English vocabulary of second language. The researcher inquired the knowledge from preschoolers through point out the things which were kept in class. It was concluded that maximum number of pre-schoolers knew very well about the things which were kept in class and a very low number of students knew about the class materials. It was concluded that these things are very helpful for improving cognitive development of pre-schoolers.

5. It was observed that the cognitive development is improved by using visual aids authentic material so obtained a good result from pre-schoolers the management of school kept the LCD in class so that students got knowledge and improved cognitive development. The researcher concluded that pre-schoolers very interestingly involved in improving and recognition mental process. Visual progression of learning very well imparts the cognition process during the class period. Visual evolution parament source of learning development. Through visual learning process the factor of exploration of pre-schoolers developed and enhanced.
6. The recall or recognition of knowledge developed intellectual abilities. The researcher collected information related to past events of pre-schoolers which was showed that the improvement of memory. Maximum number of students and toddlers knew very about their past events but a very low number of students who got knowledge about their past events. Past activities enhanced and improved
7. In conclusion, researcher added information of pre-schoolers who had acquired oral knowledge without viewing the bag consisted material and class kept things which was showed that metacognitive development was improved. Recognition of things support the cognitive development of toddlers. Remembering, recognition, and memory are part of cognitive development. Maximum number of pre-schoolers responded very well. They had good knowledge about the present things in the class.
8. View of postulation that pre-schoolers improved their metacognitive development through use of flash card and other helping material which printed or shaped alphabets. Matching alphabets and shapes improved the cognitive development of preschoolers. In concluding results that maximum number of preschoolers gave and respond favourable. Flash cards and other helping material support and enhanced a valuable improvement in learning and cognitive development.
9. Consequences of researcher conversation with pre-schoolers cognitive development efficiently achieved through conversation with pre-schoolers. The researcher himself made conversation with pre-schoolers in very simple sentences so that it checked and observed the metacognitive development. Maximum number of preschoolers respond very well but a little number of students answered in low level because most of students feel hesitation to talk with researcher. They did not answer properly in good manners.
10. The researcher displayed concluding results after doing conversation with pre-schoolers. In this techniques of conversation, the researcher checked two techniques of language skills like listening and speaking. Only with the help of conversation the researcher manipulated the frankness of speaking and mental power of listening. At this level only these skills of speaking can show and displayed the metacognitive development.

### **Recommendations**



1. Education department should open up pre-schools having maximum facilities such as proper infrastructure, learning material and qualified staff.
2. A educational and professional staff should establish a preschool class in improving the quality of education in the presence of skills and knowledge of early childhood education.
3. It is expected to provide contributions in pre-schools for parents and teachers in which learning material and flashcard may be able to improve the early reading skills.
4. Emphasize the activity of students in the process of learning to optimize the involvement of students and turned out to give a result that is quite effective to create an atmosphere of learning as it requires the skills of a lecturer or teacher in terms of material in cognitive development.
5. It is suggested to researchers implement flashcards and other authentic material for longer and more intensive time that proves a higher level of effectiveness.

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