

**Developing Critical Thinking Skills in Early Years through Early
Childhood Care and Education**

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Abstract

Today's children need to learn how to filter useful information from a plethora of information. For this purpose they need to learn critical thinking skill. Our educational practices do not allow children to think and express their ideas, as the teachers in our schools consider themselves authority on the knowledge. Moreover, the main purpose of teaching is to complete the syllabi and enable students to pass examination. The National Curriculum of Early Childhood Care and Education 2017 provides guidelines for developing critical thinking skills in young children. This study was an attempt to find out whether the classroom environment and instructional strategies used at ECCE level are appropriate for developing critical thinking skills in young children. The sample included 15 ECE classrooms in Muzaffarabad city. These classrooms were observed and informal interviews were taken from the teachers of these classes. It was concluded that the teachers at ECE level were not fully aware of an important objective of the national curriculum suggested for this level. The activities and strategies required for developing critical thinking skill are rarely adopted by the teachers. Their basic focus remains on reading, writing and numeracy. Teachers mostly use the traditional methods of teaching that make the kids passive learners.

Keywords: critical thinking, early childhood care and education,
national curriculum for ECCE.

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Introduction

The continuously changing world and a plethora of information require children of today to learn how to get the knowledge, not to learn the facts and figures. Gone are the times when teachers were the only source of information for students. Today, children have many sources of information in printed and electronic forms. However, our educational practices are still in old school ways. The most important skill of children that is slighted in schools, rather than being encouraged, is thinking critically. The skill of thinking critically enables an individual to make objective analysis of information resulting in logical and rational judgement (Doyle, 2022) without any bias (Ryan, 2022). Despite the fact that it is the most important life skill in this century, our teachers rarely acknowledge its importance. Specially, the very young kids are usually treated as blank slates to learn whatever teachers want them to learn.

The recent educational policies of Pakistan put emphasis on early childhood care and education (ECCE). National Curriculum of Early Childhood Education (NCECE) has been revised in 2017 to provide guidelines for developing activities and syllabi for students in preschool years.

This curriculum is aimed to foster children's overall well-being and to ensure the best possible conditions for growth and development in a conducive, child friendly and all-inclusive environment where they can experience choice and freedom of actions in a safe, guided and healthy environment (GOP, 2017; p.1).

One of the objectives of NCECE 2017 is to develop critical thinking in the children at early childhood level. The curriculum identifies key learning areas, competencies and expected learning outcomes for ECCE. The curriculum document also includes guidelines for expected learning outcomes and ideas for implementation. In the section 2.6 under the key learning area of Basic Mathematical Skills the first competency includes development of critical thinking skill. The activities to develop these skills include differentiation, classification, comparison, etc. The children are supposed to work with concrete material and make observations around in the environment. The document provides guidelines for creating a conducive learning environment through planning classroom activities and developing assessment criteria.

The objective of this study is to find out whether the classroom environment and instructional strategies used at ECCE level are appropriate for developing critical thinking skills in young children. The study provides an insight regarding the extent to which an important objective of the ecce curriculum is being achieved in our schools. There is

need to see the effectiveness of the curriculum regarding achievement of its objectives, so that necessary changes can be made to bring improvement. This study will also open vistas for further research to evaluate the effectiveness of the NCECCE.

Literature Review

Same as the other psychological constructs, there is no single definition for critical thinking. Mahmood (2017) identified how has this construct been defined in different perspectives. In educational perspective it involves ability of logical inquiry and to deduce from the information. In psychological perspective it involves mental processes of problem solving, learning new information and making decisions. In philosophical perspective it involves goal oriented judgement and reflective thinking.

Critical thinking leads to finding creative connections between various ideas and systematic ways to discover solutions through logical reasoning (Li, 2022). Critical thinker consider different viewpoints with open-mind and weigh evidence with clarity of thought (Drew, 2022). It also helps kids develop reasoning skills. They can find the correct answers by asking right questions, however, classrooms offer drills and memorization rather than teaching how to think (Li, 2022). Critical thinking provides strong base for education. Teachers usually confine reading skills to identification and understanding of the words. Whereas, reading comprehension coupled with critical thinking help children master the information (Gordon, 2021).

Critical thinking is not only important in classroom, it has several benefits for workplace as well (Murawski, 2014). Liu, Li, Shang and Ren (2021) found association of critical thinking skills with mental health. Heyman (2008) asserts that critical thinking does not develop merely as a result of maturation but it has association with social experiences. Therefore, it is worthwhile to teach kids to think critically.

Rymanowicz (2016) suggested some guidelines for developing critical thinking skills in children which include encouraging curiosity, helping children evaluate information, promoting interest and teaching problem solving skills. Li, (2022) also suggests some everyday activities to promote critical thinking in children. For example, encourage questions and explain things when children ask questions without thinking that they are too young to understand. Allow them to question the orders instead of insisting on blind obedience. Shah, Nazir and Arshad (2021) assert that use of information and communication technology (ICT) in ECE may enhance students' critical thinking skills.

The research suggests that students' behaviors in the classroom may be influenced by their teachers' perceptions of critical thinking (Choy and Cheah, 2009). However, teachers often misunderstand the term and mix it with attitude, understanding and other dispositions (Pollarolo, 2022). Even in the advanced countries researchers find a need to improve teachers' understanding of critical thinking and the strategies for developing this skill (Bhatt, 2022). Aliakbari and Sadeghdaghighi (2013) found teachers' lack of critical thinking knowledge as a barrier in implementing critical thinking in classrooms.

Research has been carried out in Pakistan concerning critical thinking in various fields of life. For example, Seed et. al. (2012) studied teachers' questioning skills for developing critical thinking in the students of nursing baccalaureate programs in Pakistan. They made classroom observations and found that teachers' use questions which are at lower levels of Bloom's taxonomy of cognitive learning. Whereas, higher level questions are needed to develop critical thinking.

In a review article Nauman (2016) asserts that one reason of the low quality of research in Pakistan is the lack of critical thinking and there is need to revamp the education system to inculcate critical thinking skills in our students. Ali and Awan (2021) found correlation between critical thinking skills and academic achievement of undergraduate science students. Mahmood (2017) studied the effectiveness of a critical thinking skills intervention program for the students of teacher education program and concluded that "practical learning and instruction of CT skills in classrooms are difficult endeavors that require competent teachers, supportive infrastructure and institutional support" (p. 255).

In the light of literature review, it is evident that the research in the field of ECE mostly addresses issues and problems in ECE programs, and in the field of critical thinking, the research has been carried out about adult population. There is little research on development of critical thinking skill in young children. Therefore, this study has been conceptualized to examine the strategies that teachers use to develop critical thinking skills in the students through early childhood care and education.

Methodology

The nature of the study is qualitative. In order to get relevant information classroom observations were made and informal interviews were taken from class teachers.

Participants of the study

The study was conducted in the city of Muzaffarabad. From different areas of the city 15 schools were selected. Five public schools

and 10 private schools that offer early childhood education, were selected conveniently. The ECE classrooms in these schools were observed and the teachers were interviewed.

Data Sources

The relevant information was gathered through direct observations of ECE classes and informal interviews from the class teachers. Lesson planners of a few teachers that were available at the time, were also viewed.

Data collection

For collection of the data, researchers visited the selected schools. The consent of school authorities and teachers was taken before the visit. The researchers observed the classes for 15-20 minutes and took 8-10 minutes for informal interviews with the teachers. Lesson planners, where available, were also viewed during interviews.

Results

During the observations it was noted that mostly classroom environment was tightly controlled by the teachers and class activities were being carried out as planned by the teachers. Teachers had their lessons planned for the given time and they only wanted to complete it.

A teacher showed her planner and pointed out the tasks she had planned for the class. During the class she only focused on the planned tasks and kept the kids on the same track. Children were simply following what teacher was asking them to do.

In another class teacher was teaching alphabets with the help of flash cards. She showed a card and kids called the alphabets' names in unison. Then they were asked to practice writing the learnt alphabets on their worksheets.

It was observed that teachers use questions answer technique in the class, however, the purpose of questioning is usually to assess that how well kids remember the learnt facts.

In one class a question answer session was going on. The nature of questions and their answers showed that students were just reproducing the information already taught. Even the questions regarding *How* and *Why* got the same answers from all kids.

Teacher: Why should we wash our hands before eating meals?

Students together: To kill the germs.

Questions were mostly posed by the teachers and seldom by the kids. Even if a kid tried to ask a question and teacher found it irrelevant to the ongoing task, she ignored the question.

During an activity of counting threaded beads in groups of 10, a kid pointed out that one group has more than 10 beads because the thread was longer than the others. It was due to the larger size of beads on that

thread. The teacher instead of correcting the kid's concept or initiating a debate, just put the different thread aside.

In all the 15 classes there was no outdoor activity, neither the planners of the teachers showed any such plans. When teachers were asked about it, one teacher said:

It takes time and we have limited time to cover the syllabus.

Another said:

You know these kids are too young to control outside the classroom. They will cause disturbance in the school.

A private school's teacher mentioned:

There is no open space within school's periphery for young students' activities. We try to provide activities within classroom.

It was observed that the activities provided in the classrooms were planned by the teachers and strictly followed by the students. Kids did not have liberty to question the activity or carrying out the activity in a way which is not planned by the teacher.

It was observed that the physical layout of classrooms was not dull. There were colorful charts and decorations on walls but the emotional and cognitive environment was not so lively.

In a class when teacher entered the classroom, the kids greeted her in unison and then sat quietly. A few kids were restless but they were immediately told by the teacher to be disciplined.

During the observations, teachers were asked a few questions about the observed phenomena in relation to developing critical thinking skills in their students. When teachers were asked about the NCECCE and its objective related to critical thinking, almost all were unaware of the presence of this document. One public school teacher said:

We design the curriculum for this level ourselves. The main purpose is to prepare the kids for next level.

A private school teacher said:

Our school has a chain of branches. We have a centralized curriculum developed and provided by the headquarters. We have to follow it and complete it within the required time.

Regarding the development of critical thinking skill, one teacher said:

They [kids] are too young to think critically. Even if they do, we [teachers] cannot follow their thinking because it will take the whole process of teaching and learning out of the track.

When teachers were asked about letting students ask questions, one teacher said:

They usually ask silly questions and waste time.

Another teacher had the opinion:

Yes, I allow the students to ask question and answer the questions that are relevant to the task at hand.

A public school teacher responded to the question about teachers' questioning in the class:

Oh! How long you can wait for kids to answer a tricky [requiring thinking] question. I sometime ask such questions but you know we have time constraints.

Findings and Discussion

The results of classroom observations and interviews with teachers revealed that an important objective of the NCECCE is not being considered duly in ECE classrooms. The classroom environment, teaching strategies and teachers' behaviours are not apt for developing critical thinking skill in young children.

The environment of classroom was found physically impressive but emotionally and cognitively dull. Developing a child friendly environment is essential in ECE (Murtaza, 2011). Classrooms are not sufficiently arranged and equipped for students' activity. Ahmad, Anjum and Rahman, (2015) found that situation of physical facilities is worse in public schools than in the private schools

Teachers had planned lessons and activities for students and their main focus is on completing the task of the day and then completing syllabus in time. Teachers ask questions but these questions rarely make children think. Choy and Cheah (2009) asserted that sometime teachers think that they are fostering critical thinking skills in the students but actually there emphasis is on understanding of the content.

Teachers mostly use traditional methods of teaching. Student at ECE level are rarely given the chance to do outdoor activities. This practice contradict to the guidelines given in NCECCE 2017 that the children are supposed to work with concrete material and make observations around in the environment. One reason for this deficiency is the lack of open spaces especially in private schools. Though, public schools have comparatively large open areas, the teachers find it difficult to control students outside the classroom. Teachers face such difficulties due to the lack of training. Ahmad, Anjum and Rahman (2015) found that trained teachers for ECE are not available in both public and private schools.

The teachers in ECE classrooms were not clear about critical thinking skill and its importance for young children. They had an impression that young children lack the ability to think and express their ideas clearly. They do not want to spend time in conversation with children because they think it wastes time allocated for planned activities. Aliakbari

and Sadeghdaghighi (2013) asserted that the lack of critical thinking knowledge is a barrier in implementing critical thinking strategies in classroom.

Teachers at ECE level were not fully aware of the National Curriculum for Early Childhood Care and Education. Schools develop ECE curriculum on their own and usually, this curriculum concerns with 3Rs that is reading, writing and arithmetic. Teachers found themselves compelled to complete the syllabus. Some ECE teacher training programs plan their courses with reference to NCECCE but there is no evidence of proper implementation of the guidelines given in this curriculum. Malik, Asghar and Khalid (2021) analyzed ECE Teacher Training Guidebook and found its association with NCECCE. However, they did not answer the question of implementation of this curriculum in schools. It seems that there is much paper work about ECCE but very little on ground implementation of the guidelines provided in the document.

Conclusion

The results of this study revealed that the teachers at ECE level are not fully aware of an important objective of the national curriculum suggested for this level. They teach young children only to prepare them for next grades. The activities and strategies required for developing critical thinking skill are rarely adopted by the teachers. Their basic focus remains on reading, writing and numeracy. Teachers mostly use the traditional methods of teaching that make the kids passive learners.

There is need to make schools administration aware of the National Curriculum for Early Childhood Care and Education so that they develop their syllabi according to the guidelines provided in the National Curriculum. Teachers need to be trained to use this curriculum in full spirit. The training programs for ECE teachers may add teaching special techniques for developing critical thinking.

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