

Pedagogical Content Knowledge of Elementary Teachers and Learning Outcomes



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Abstract

"Any enlightened human being can be created by the teacher through providing two unique characteristics. One is building capacities among the students to inquire, to innovate, be creative and moral leadership; second is the development of social value system".(Kalam, 2008)

Elementary education is the base of all education systems, where every individual has get foundation for further education. The overall development of a child is possible only by strong foundation of elementary education. Proper elementary education leads one within the direction of achieving his goals. Learning is a process through which we acquire new modes of behavior or modify the existing modes of behavior. Human behavior is classified into three domains: cognitive (thinking), affective (feeling), and psychomotor (doing). Teaching is a purposeful activity done to facilitate learning. Teaching is an activity done to facilitate the students to acquire (factual) knowledge, to form (desirable) attitudes and to develop (required) skills. Therefore researcher thought the need of this study. This paper is an extract of Ph.D. work entitled "Study Of Learning Outcome Of Students In Relation To Pedagogical Content Knowledge Of Elementary Teachers".

Keywords: Content, Pedagogy, Social Studies, Learning Outcomes.

Introduction

"Any enlightened human being can be created by the teacher through providing two unique characteristics. One is building capacities among the students to inquire, to innovate, be creative and moral leadership; second is the development of social value system." (Kalam, 2008)

The above quotation of Dr. Kalam put forth the whole scenario of process of education including aims of education, dimensions of education and role of the teachers. Here, the emphasis is given

on social development and role of teacher. It also explores the interdependence between individual and social development and role of a teacher as a catalyst in this process, and this relationship between society and education is also explained in the report of UNESCO.

The report says - "Education is a social experience through which children learn about themselves, develop interpersonal skills and acquire basic knowledge and skills. This experience should begin in early childhood in different forms depending on the situations but always with involvement of families and local communities". (Delors, 1996)

The report claims education as social practice through knowledge and skills. With relation to this quotation report also emphasize that – "Education is at the heart of personal and community development, it's mission is to enable each of us, without exception, to develop all talents to the full and realize our creative potential, including responsibility for our own lives and achievements of personal aims". (Delors,1996)

Both the arguments made by Delors Commission are with different perspective, the first one highlights the role and significance of society for education and the other focuses the vitality of education for individual as well as social development. These two arguments are complimentary to each other but the relationship between them is not simple and easy to manipulate. Education has uplifted mankind from status of animal to human being. It has driven human desire from Stone Age to contemporary age of technology to know the world and create new things for his development. Education has initiated a new process of evolution on

the social, cultural, psychic, scientific level. It has produced significance in human life. Its role in the individual and social development is beyond the debate but the debate on meaning of aims, curriculum and methodology is ongoing. The meaning, goals and functions of education have been changed in the context of philosophy of Education. There are many schools of educational philosophy developed in Eastern and Western countries. In India, Sankhya, Vedanta, Yoga, Nyaya, Buddhism, Jainism, Charvaka etc. are the most popular schools; Idealism, naturalism, realism, pragmatism and existentialism are popular western schools. They have proposed objectives of education, curriculum, teaching methods etc. with their own views. The different opinions on educational issues among the various schools have enriched education in many ways. The plurality in views, approaches and methodology broaden the educational horizons. It has given opportunity to include diversified people in the process of Education. Now a day, education is not purely scholastic as it was in ancient or medieval period. It is being global process in all dimensions. In the conventional education pupils are made to learn from a fixed syllabi of courses, it is subject centered and it leads to greater use of memory than of other mental processes. Reasoning, creativity and originality. So conventional nature of education is insufficient and unable to fulfill the needs of pupils in the modern world. Due to the conventional nature of education is being vanished and new form of education is coming into appearance through the efforts initiated by all sides.

Review of Literature

Researcher had explored that one study is based on Technological Pedagogical Content Knowledge (TPACK) which has been introduced as a conceptual framework for the knowledge base teachers need to effectively teach with technology. The another study was conducted by Shulman, L.S. in the year 2000 on "Teacher development: Roles of domain expertise and pedagogical knowledge" in the *Journal of Applied Developmental Psychology*, 21(1), 129-135. Here also the technology inputs can be seen. There is a need of the study to explore the social science area.

Goals of Education and Their Vitality

Goals produces meaning and significance in the education, they provides direction to curriculum, teachers, students, society and all the elements of educational system. The goals of education are emerged from the needs and context of the society. They reflect the ideology of the society since the long history of development of society. The goals of education are changed in accordance of philosophy of society, geographical, socio-economic political context of the society. Many times the contradictory goals were set by education in same period due to different philosophical perspective. The whole process of Education is based on three foundations; Philosophical, Sociological and Psychological Foundation. The goals of Education emerged on this backdrop. These goals determined the directions in which the society moves and moulds. Generally these

goals are classified with the following perspectives, a) Cognitive, b) Affective and c) Social and the Four Pillar of Education are: Contemporary education is at a decisive point in this context. The role of education has become more challenging, complex and vital today rather than any age that mankind has seen. A new exercise as millennium goals has been placed by UNESCO. Education as a total experience organised around four equal and complementary types of learning which enable learning throughout life. It means:

1. Learning to learn
2. Learning to do
3. Learning to be
4. Learning to live together.

Learning to live together means understanding others take responsibility for participating in and contributing to society.

Learning to live together involves –

1. Understanding self and others.
2. Respecting, diversity and different system of function.
3. Understanding civics and responsible citizenship.
4. Ready for cooperation, contribution and participation.
5. Understanding rights and responsibilities.
6. Shared purpose, similarities, common human experience and interdependence.

By this mean 'Education' should contribute peace and security by promoting understanding and collaboration by fostering human development and for this development school education played a vital role. Hence, it is necessary to carefully consider some specific objectives.

General Objectives of School Education

Perspective of teacher education emerges from the objectives of school education which reflect concerns for fulfillment of individuals potential in harmony with collective human aspirations. To this end the NCFSE-2000 presents a comprehensive set of educational objectives.

They are as follows –

1. Learning abilities of Listening, Speaking, Reading, Writing and Thinking and Communication Skills – verbal and visual needed for social living and effective participation in the day to day activities.
2. Mathematical abilities to develop a logical mind that would help learner performs mathematical operations and apply them in everyday life.
3. Understanding of the diversity in lands and people living in different parts of the country and the country's composite cultural heritage.
4. Appreciation of the scarifies and contributions made by freedom fighters and social workers from rural, tribal and weaker sections from all the regions of the Indian society, particularly from the North-East and the Andaman and Nicobar Islands, in India's freedom struggle and social regeneration and readiness to follow their ideals.
5. Knowledge of and respect for national symbols and the desire and determination to uphold the ideals of national identity and unity.

6. Deep sense of patriotism and nationalism tempered with the spirit of Vasadhaiva Kutumbakam.
7. Understanding of positive and negative impact of the processes of globalization, liberalization and localization in the context of country.
8. Qualities clustered around the personal, social, moral, national and spiritual values that make a person humane and socially effective, giving meaning and direction to life.
9. Knowledge, attitude and habits necessary for keeping physically and mentally fit and strong in perfect harmony with the earth, water, air, fire and the sky.
10. Qualities and characteristics necessary for self learning, self directing learning and life long learning leading to the creation of a learning society.
11. Capacity not only to process information but also to understand, reflects and internalize and develop insight.
12. Willingness to work hard, entrepreneurship and dignity of manual work necessary for increasing productivity, obtaining job satisfaction and creating wealth generating systems.
13. Acquisition of pre vocational/vocational skills.
14. Cultivating proper respect and care for the aged.

These objectives focus on the continuous growth and development of individuals as Indians in the twenty first century. Hence, teachers need a thorough understanding of the emerging social, cultural and economic contexts and also the sensitivity and social concerns while imparting education by considering man as a social animal. Here the need of improvement in Pedagogical Content Knowledge is very essential to enhance achievements. There is always a relation between nature, needs of society and educational system because there are specific expectations of the society from education. Besides the goals, needs and culture of a complex society changes over a period of time. As a result, in the same society, the functions of education may be different at different times. For e.g. in Agricultural Society, the main function of educational system was the socialization of the new generation by transmission of the cultural heritage and maintenance of stability and continuity by conforming them to the social traditions. After independence, the functions of the educational system have been greatly diversified and enlarged. Besides the socialization of the new generation, it has to perform several new functions of preparing it for social change, providing them diversified education and training for varied occupations, selecting and allocating the trained personnel for different positions in society, providing social mobility to them. Due to changing nature of society all type of development of child is pressured on Educational system.

According to National Knowledge Commission (2007) "NKC believes that providing universal access to quality school education is a corner stone of development and a minimum necessary condition for any progress towards making India a knowledge society."

Again, NKC in their reports of year 2008 and 2009 emphasised the access, affordability, equity and excellence in the field of education as necessary condition of development. In the developmental child 'Intelligence' is one of the part of development and this concept have a wider sense in new era of world.

Agencies of Education

Society has developed a number of specialized institutions to carry out the functions of education. Some of these agencies are formal set up more or less deliberately by society. Such agencies have been specifically created with the objective of carrying out the various functions of education. Informal agencies include institutions which diffuse and transmit culture and knowledge from one generation to another in an informal, unorganized manner. The family, the play group and the community are some of the informal agencies.

Social Science Pedagogical Content Knowledge

Pedagogical content knowledge has few components which needs to be discussed as follows:

1. Knowledge of Language: Knowledge of subject and delivery language is essential
2. Knowledge of Concept – each content of the subject needs to be very clear and deliver very systematically
3. Significance of the topics: Every topic which is going to teach in the classroom has a clear significance.
4. Value Perspectives– Inculcate values
5. Perspectives – Understanding the content knowledge and current updated

Aim of the Study

Education is held to be just like the backbone of our society and every individual has the right to get an education. Elementary education is the base of all education systems, where every individual has get foundation for further education. The overall development of a child is possible only by strong foundation of elementary education. Proper elementary education leads one within the direction of achieving his goals. Learning is a process through which we acquire new modes of behavior or modify the existing modes of behavior. Human behavior is classified into three domains: cognitive (thinking), affective (feeling), and psychomotor (doing). Teaching is a purposeful activity done to facilitate learning. Teaching is an activity done to facilitate the students to acquire (factual) knowledge, to form (desirable) attitudes and to develop (required) skills. Learning is a process of information processing. It involves reception, selective perception, semantic encoding, storing in long term memory and o retrieving whenever necessary. Teaching should be arranged so as to enable the process of learning. In the Fourth Survey of Research in Education (Buch, 1992) about 20 studies were reviewed related to teaching. But in the Fifth survey of research in education (1997), 44 studies on teaching were reviewed and placed in a separate chapter. This is a potent indicator of the momentum gained by the research on teaching.

Conclusion

Thus, regarding the betterment of our respective child, we want to give good and quality

elementary education. With the help of good pedagogy we fulfil our goal. Pedagogy plays an important role in process of teaching at any level of education but elementary level of education it have more importance. Pedagogy involves teaching-learning process, aim of study, objectives, preparation of lesson plan, preparation and handling of teaching aids, classroom interaction, skill development, learning environment, evaluation process, etc. So there is need to make effective pedagogical aspect for better learning outcomes in elementary education. Annual status of Education Report (ASER) also says about continuous weak performance of our students on primary level. According to 2014 report, 13.4% students of class second do not distinguish words in 2010, and now that ratio is 32.5%. Only 48.1% Class fifth students read lesson of second class. In class eighth, 25.4 student do not read properly second class lesson. Teacher performance is also a big problem. In recently held central teachers eligibility test (CTET) for determining the eligibility to join teaching, the result was too dismal as 99% of the aspirants failed the test. So the researcher wants to conduct the study on pedagogical aspect and learning outcomes of elementary school teachers and students.

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