

ENRICHING THE ELEMENTARY EDUCATION WITH CONSTRUCTIVISTIC APPROACH

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This paper deals with the feelings of a child of Class I and many more children having the same feelings. (Based on empirical evidences). Further, it deals with the solutions as provided by Constructivist approach.

INTRODUCTION

The period of elementary school (from Class-I to VIII) is now also recognised as the period of compulsory schooling vide the constitutional amendment making education a fundamental right. The beginning of this period marks the formal introduction of the child to reading, writing and arithmetic, culminating in the introduction of the formal disciplines such as sciences and social sciences towards the end of elementary school. During this period of eight years, tremendous cognitive development, shaping reason, intellect and social skills, as well as the skills and attitude necessary for entering the work place happens. Being a parent, when one searches a school with quality education even in a big city, one gets bewildered. Because many so called private and public schools may have play fields, drinking water facility, toilet and library, but they may lack teacher - taught ratio and more important, the methods of transaction of the curriculum which are the main determinants of quality education. Here is a mental state of a child studying in a very reputed and famous convent school – supposed to impart quality education – of Lucknow City.

I am six year old and a student of class-I.

I like to play and play.

I like to talk to my classmates.

Whenever I want to share something important to me with my friend, teacher punishes me.

I do not like to write too much.

I am unable to answer all the answers correctly.

I am unable to copy down from the black-board correctly.

Why I have to study too much?

I like my teacher very much.

Approximately 90 per cent of students of this age group studying in well reputed schools, which are supposed to provide quality education, have the same feeling. The subjects of study of the above mentioned child includes – English language, English literature, Hindi, Mathematics, G. K. (with a text book), Environmental Studies (a book), Moral Science (a book), Drawing (one period in a week), and P. T. (one period in a week). With the strength of approximate 60 students in a class, the class-teacher teaches all the subjects. Quite surprisingly, the subjects like Moral Science, and Environment Studies are taught just like English literature and evaluated in a similar fashion. In each subject, the teacher just introduces the chapter by writing questions and answers, word meaning, fill in the blanks, opposites, etc. on the blackboard. The students are supposed to copy down quickly and correctly from the chalkboard and learn all the things at home. The major responsibility lies with the parents to see that whether their children are able to understand, learn and comprehend the subject matter and cope up with the pace of the teacher.

The impulse to teach everything arises from lack of faith in children's own creative instinct and their capacity to construct knowledge out of their experience. The size of syllabi has been growing over the years, even as the pressure to include new topics and subjects mounts and effort to synthesize knowledge and treat it holistically get weaker. Flabby text-books and the syllabi they cover, symbolize a systematic failure to address children in a child-centered manner. School administrators and teachers are guided by the popular belief that there has been an explosion of knowledge. Therefore, vast amount of knowledge

should be pushed down the throats of little children in order to catch up with other countries. This places stress on children to become aggressively competitive and exhibit precocity.

In the world of competitive economy the individual is exclusively placed in competitive relationship, which puts unreasonable stress on children and thus distorts values. Schools are also being drawn into increasingly competitive environment and at the same time the aspiration of parents place a tremendous burden of stress and anxiety on all children including the very young which result into the detriment of their personal growth and development, and thus hampering the inculcation of the joy of learning. It also makes learning from each other a matter of little consequence. This indicates that learning has become an isolated activity, which does not encourage children to link knowledge with their lives. Schools promote a regime of thought that discourages creative thinking and insights. What is presented and transmitted in the name of learning in schools bypasses vital dimensions of the human capacity to create new knowledge. The “future” of the child has taken centre stage to the near exclusion of the child’s “present”, which is detrimental to the well-being of the child as-well-as the society and nation. The school system is characterized by an inflexibility that makes it resistant to change.

To make teaching a means of harnessing the child’s creative nature, a fundamental change in the matter of organizing the school curriculum and also in the system of examination which forces children to memorise information and to reproduce it, need urgent attention. To address above mentioned deep structural problem, the National Curriculum Framework 2005 elaborates on the insights of 'Learning without Burden'. The guiding principles of this document are: Connecting knowledge to life outside the school; Ensuring that learning is shifted away from rote methods; Enriching the curriculum to provide for overall development of children rather than remain textbook centric; Making examinations more flexible and integrated into classroom life and; and nurturing an over-riding identity informed by caring concerns within the democratic polity of the country. This document has emphasised on the need to recognise the child as a natural learner and knowledge as the outcome of the child’s own activity. The teacher can provide the solutions of the feelings of above mentioned child who is somewhat unsatisfied, in the context of guiding principles of NCF 2005 with the knowledge of constructivism – a philosophy of learning and changing his/her attitude accordingly. For example :

I like to play and play:

This child and most of the children of this age group donot want to study. They want to play all the time. In play a person experiences the pleasures of performing a task for its own sake. Thus, when enjoyment is introduced in an activity, it is said to be done in the ‘play way’. Many educationists like John Dewey, Maria Montessori, and Froebel have advocated play way method at Primary Level. All the subjects like literature, language, mathematics, science, nature study, moral and social training can be imparted through this method.

According to Lev Vygotsky, a social constructivist, play mediates the learning of children, and, through play, children develop abstract thought. Mediate means that, in play, children reach beyond their real selves as they take on the roles of the characters they choose to be, and take action appropriate to the behavioral rules that govern those roles. e.g. a child pretending to go to sleep follows the rules of bedtime behavior. As children enact in make believe, they come to better understand social norms and expectations and strive to follow them.

I like to talk with my classmates/Whenever I want to share something important to me with my classmate, teacher punishes me:

As the NCF 2005 has rightly pointed out that much of our school learning is still individual based (although not individualized). The teacher is seen as transmitting ‘knowledge’, which is usually confused with information, to children and organizing experiences in order to help children learn. But interaction with teachers, with peers, as well as those who are older and younger can open up many more rich learning possibilities.

According to constructivistic approach to learning, teachers and students together construct the knowledge of the classroom through their interaction, blazing their own educational paths. It means that teachers and peers can be joint contributors to students learning. In peer tutoring one student teaches another. In cross-age peer tutoring, the peer is older. In same-age peer tutoring, the peer is from the same class. Cross age peer tutoring usually works better than same age peer-tutoring.

Researchers have found that peer tutoring often benefits students' achievement (Mathes, Howard, Allen & Fuchs 1998; Simmons, Fuchs, Fuchs, Mathes & Hodge 1995). And in some instances, the tutoring benefits the tutor as well as the tutee. A study conducted by D. Fuchs, L.S. Fuchs, Mathes & Simmons (1997) evaluated effectiveness of a peer tutoring programme for three learner types: low-achieving students with disabilities, low-achieving students without disabilities and average-achieving students. Twelve schools were randomly assigned to experimental (peer-tutoring carried out) and control (no peer tutoring) groups. The peer tutoring programme was conducted during regularly scheduled reading instruction 3 days a week for 35 minutes each of these days and lasted for 15 weeks. The training of peer tutors emphasized helping students get practice in reading aloud from narrative text, reviewing and sequencing information read, summarizing large chunks of connected texts, stating main ideas, predicting and checking story out comes, as well as other reading strategies. Pre-and post treatment reading achievement data was collected. Irrespective of the type of learners, students in the peer tutoring classrooms showed greater reading progress over the 15 weeks than their counterparts who did not receive peer tutoring. Therefore, whenever the teacher is busy with some other activity of school and asks students to put their head down on their desks, keep quiet or asks some elder student to maintain discipline in the junior class by beating or punishing the junior students while they are talking to their peers, he/she must utilize and exploit the situation and use these new strategies. In the early primary school years, beginning has been made in the area of group work. Dewey's pedagogy encouraged teachers to engage students in problem-oriented projects and help them inquire into important social and intellectual problems. He argued that learning in school should be purposeful rather than abstract and that purposeful learning could best be accomplished by having children in small groups pursue projects of their own interest.

I do not like to write too much:

John Dewey became famous for pointing out that the authoritarian, strict, preordained knowledge approach of modern education was too concerned with delivering knowledge, not enough with understanding students' actual experiences. Each person is different genetically and in terms of past experiences. Even when a standard curriculum is presented using established pedagogical methods, each student will have a different quality of experience. Thus, teaching and curriculum must be designed in ways that allow for such individual differences. Further more, students need educational experiences which enable them to become valued, equal and responsible member of the society. e.g. one student loves school, another hates the same school. This is important for educators to understand. Whilst they can't control students' past experiences, they can try to understand those past experiences so that better educational situations can be presented to the students. Ultimately, all a teacher has control over is the design of the present situation. The teacher with good insight into the effects of past experiences which students bring with them better enables the teacher to provide quality education which is relevant and meaningful for the students.

According to National Curriculum Framework 2005, the curriculum must explicitly incorporate the progression that learners make from the concrete to the abstract while acquiring concepts. Apart from computational skills, stress must be laid on identifying, expressing and explaining patterns, on estimation and approximation in solving problems, on making connections, and on the development of skills of language in communication and reasoning. Encouraging children to use language to freely express one's thoughts and emotions, rather than in predetermined ways, is extremely important at this and at later stages. At early stages of schooling there should be focus on oral activities and craft.

I am unable to answer all the questions correctly:

Childhood is a period of growth and change, involving developing one's physical and mental capacities to the fullest. It involves being socialized into adult society, into acquiring and creating knowledge of the world and oneself in relation to others in order to understand, to act and to transform. Jean Piaget, a Swiss Psychologist and propounder of Cognitive Constructivism, is of the opinion that in the developmental process of a child there is a step of wrong notions (pre-operational stage), and this wrong and incorrect notions or answers of child is the indicator that now the child is able to understand and learn the right concept. We can't expect from a student to be correct all the time, rather the teacher must accept the wrong answers of students, diagnose him accordingly and provide variety of learning experiences to remove the gaps in knowledge. Informal learning in society builds on the learners' natural ability to draw upon and construct their own knowledge, to develop their capacities, in relating to the environment around them, both physical and social, and to the task at hand. For this to happen, opportunities to try out, manipulate, make mistakes and correct oneself are essential. This is as true of learning language as it is of a craft skill or a discipline.

Why I have to study too much:

Present education system is syllabus and examination oriented. Quality of education is considered with number of subjects in turn number of books with heavy syllabus. This results in a burden on students destroying their natural development. Time tables do not give young children enough breaks to stretch, move and play, and deprive children to play/sports time, and encourage girls to opt out. National Curriculum Framework 2005 elaborates on the insights of learning without Burden. This document seeks to enable teachers and administrator and other agencies involved in the design of syllabi and textbooks and examination reform make rational choices and decisions. It also enables them to develop and implement innovative, locale specific programmes. Jerome Bruner, was one of the leaders in the curriculum reform of this era. He and his colleagues provided important theoretical support for what became known as discovery learning, a model of teaching that emphasized the importance of helping students understand the structure or key ideas of a discipline, the need for active student involvement in the learning process and a belief that true learning comes through personal discovery. Thus, according to constructivistic approach, there is no short-cut method to learning. It takes times to organize and reorganize the learned material. The goal of education is not only to increase the size of a student's knowledge base but also to create possibilities for student invention and discovery.

I like my teacher very much:

At primary level, every child loves and likes the teacher very much. They imitate each and every action of their teacher and think whatever teacher tell them is right. For teachers. the 'good students' are the ones who are obedient, have moral character and accept the teacher's words as 'authoritative' knowledge. Children's voices and experience do not find expression in the class room. Often the only voice heard is that of the teacher. When children speak, they are usually answering the teacher's questions or repeating the teacher's words. They rarely do things, nor do they have opportunities to take initiative. According to National Curriculum Framework 2005, the curriculum must enable children to find their voices, nurture their curiosity. To do things, to ask questions and to pursue investigations, sharing and integrating their experiences with school knowledge rather than their ability to reproduce textual knowledge. Therefore need to reorient and prepare the teachers accordingly. Teachers need to be prepared to:

Care for children and should love to be with them.

Understand children within social, cultural and political contexts.

Be receptive and be constantly learning.

View learning as a search for meaning out of personal experience and knowledge generation as a continuously evolving process of reflective learning.

View knowledge not as an external reality embedded in textbooks, but as constructed in the shared context of teaching learning and personal experience.

Appreciate the potential of productive work and hands - on experience as a pedagogic medium both inside and outside the class room.

Own responsibility towards society and work to build a better world.

As reflected from the above mentioned document the constructivist teachers should have the knowledge of group dynamics as to how to structure fruitful group interaction within the classroom. When a teacher guides students to work in structured teams, students become involved in the process of exploratory learning. They interact with each other, share ideas and information, develop valuable problem solving skills by formulating their ideas, discussing them, receiving immediate feedback and responding to questions and comments by their partner. Students learn from one another because while discussing the content, cognitive conflicts arises, inadequate reasoning is exposed, disequilibrium occurs, and thus higher quality understandings emerge. This is a level of student empowerment which is unattainable with a lecture format or even with a teacher-led whole class discussion. The empowerment of students produces an environment which fosters maturity and responsibility in students for their learning. The teacher then becomes a facilitator instead of a director and the students become willing participants instead of passive followers. The teacher should serve as a resource and facilitator rather than an expert. This is not a passive role for teacher because it requires a lot of planning and preparation on the part of the teacher. The role of the teacher should be to construct a platform and create an atmosphere where students formulate their own constructs or solutions by thinking critically, become actively involved in defining questions in their own language and work out answers competently instead of reproducing materials presented by the teacher as the text book. When students are able to achieve this, the role of the teacher, in its true sense is fulfilled.

CONCLUSION

Learning and development are reciprocally and dynamically interwoven processes, which occur formally, and informally across many settings, one of which is the classroom. To understand what is available to be known and how it is constructed, one must examine what is occurring within the inter-subjective spaces as participants interact with each other.

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