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EXISTENTIAL ANGST IN THE SELECT WORKS OF ROHINTON MISTRY

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ABSTRACT

The Indo – Canadian Diaspora writing is one such phenomenon where writers like Rohinton Mistry, Uma Parameswaran, M. G. Vassanji, etc. have received wide critical acclaim. The writings of all these authors have one common theme: the expatriate experience and their alienation from the socio-cultural atmosphere. Rohinton Mistry has marveled as a writer in the field of Diaspora writings and his works are often the mixtures of history, human sensibility, issues of identity, and problems of ordinary life, Indian ethos and the enigma of existence. His works often are the reflections on history and express existential angst. 'Existential Philosophy' – whose key figures include Jean Paul Satre, Albert Camus, Soren Kierkegaard, and Martin Heidegger – focuses on the human as an isolated creature delving into an alien universe where life has no purpose and significance as it moves from nothingness to nothingness. The same philosophy of alienated universe is what the writings of Rohinton Mistry attempts to suggest as the characters of his works move through their historical past to the present of their host country. His novels Such a Long Journey (1991) and A Fine Balance (1995) deal with the 'balancing' of this existential angst of the humans in an alien world – the adopted country. Thus, he depicts his character's suffering and frustration and their survival. The present paper aims at the discovery of the 'existential angst' of the characters as found in the aforementioned fiction of Rohinton Mistry and critically analyze them in the light of Existentialism.

Key Words: Existential angst, Alien universe, Human suffering, Purposelessness.

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INTRODUCTION

The present global world has multiple opportunities of business, economics and education which prompt the migration or settlement in a new land. Such migrations are not easier as it comes with the problems of settlement and assimilation in an adopted country. The expatriates have expressed their problems through their writing which is generally categorized as the 'Diaspora writing'. Indian writers have settled in various countries

of the world but their writing always leads them back towards their origin. Canada is a country facilitating multiculturalism policy but yet the people have to face the troubles of racism and unsettlement. Indo — Canadian writing depicts the 'Indianness' and the problems of settlement and assimilation in a new land. Rohinton Mistry is a Booker Prize winner author whose writing mostly depicts the 'Indianness' and diasporic sensibilities. His works also depict the troubles and toil that the people have to go through. The

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present paper will discuss such issues of Mistry's works in the light of Existentialism.

The migration of Indians to Canada began as early as 1904 when the 5000 Indians from Punjab settled in British Columbia for the purpose of securing jobs over there. Indians found a great employment opportunity there which encouraged further immigration. Such immigration of various communities of the world to Canada has generated a variety of multicultural communities there. India is one such community contributing to the overall literary oeuvre of Canadian writing.

Indo – Canadian writing generally deals with the depiction of the problems of the Indians at Canada. Most of the Diaspora writing focuses on the expatriate experiences and their psychological suffering. The writers mostly set their works in an Indian background and describe their nostalgic past and discuss their present issues. Uma Parameswaran, M. G. Vassanji, Rohinton Mistry, Anita Rau Badami, Bharati Mukherjee, etc. are the established and widely regarded authors of Indo - Canadian Diaspora writing. Their works are the mixture of their 'Indian' instincts as well as assimilated ideals of the adopted country. These writers have immense contribution in the development and recognition of Indo - Canadian writing.

EXISTENTIALISM

Existentialism as a philosophy has its precursor in the Danish theologian Soren Kierkegard whose ideas developed thoroughly in the mid – 20° century in France and Germany. This background became imminent in its flourishing during the 1920s and 1930s and the prominent existential writers like Jean Paul Sartre, Simone de Beauvoir, Albert Camus and Maurice Merleau – Ponty came with their

influential works. The basic aim of existential philosophy is to suggest that primarily humans have no given essence or nature but to survive they need to forge their own values and meanings in an inherently meaningless or absurd world of existence. It simply suggests that as humans we are 'condemned to be free'. Existential themes include the aspects of absurdity, alienation, suicide and rebellion. The characters in such works are shown as surviving in a frustrated situation. It deals with the suffering and pain which are the inevitable parts of human life and humans constantly try to overcome it in one or the other way. According to Camus, there are three possible philosophical solutions to this situation: physical suicide, religious solution or accepting the absurdity. In the background of this theory the next section of the present paper tries to discuss Rohinton Mistry's Such a Long Journey (1991) and A Fine Balance (1995).

SUCH A LONG JOURNEY: A STUDY of EXISTENTIALANGST

Rohinton Mistry is one of the remarkable writers of present era. He is a Booker Prize winning author. He belongs to Parsi Community and his works most often deal with the depiction of Parsi life and experiences. Such a Long Journey (1991) is his very first novel which established him as a writer of remarkable talent from Canada. The novel is set in Bombay against the backdrop of the Indo – Pakistan war of 1971. The central character of the novel is Gustad Noble – a Parsi. He is a bank official. He lives in the Khodadad Building, an apartment of Parsis representing the whole Parsi community. The novel shows the corruption, knavery, hypocrisy, ugliness, tyranny and decadence of the society. Also, the author tries to show the

contemporary social and political upheavals of India. But yet, it is imbued with the existential angst of the Parsis in an adopted land.

The character of Gustad is full of dreams and aspirations. But Gustad does never lose his hope of fulfillment. He affirms his faith in reaching at a particular destination at the end of this toilsome journey of survival. The novel is more like a historical document of the personal relations and emotional life of the Parsi community. The novel is prefaced with three epigraphs; the third one is the lines from Tagore's *Gitanjali*:

And when old words die out on the tongue, new melodies break forth from the heart; and where the old tracks are lost, new country is revealed with its wonders.

The above lines are used to illustrate the Parsi's migration from one country to another and how they assimilated in an adapted land to survive. Also the title of the novel is suggestive of the continuing journey of life as well as man's struggle to survive with dignity.

The whole plot of the novel is based on the personal experiences and observations of Mistry who himself worked in a bank for ten years. The novel revolves around middle class characters and their life struggles. Gustad Noble is a middle class man trapped in the Indian political world and his domestic life clashes with the forces of money. In the beginning of the novel Gustad is shown presenting his early morning prayers and ends with his action of tearing off the black out papers which symbolically suggests the acceptance of light and reality. The novel is full of beliefs and superstitions, magic, rites, nationalistic ideas, humanism, radicalism and secular views. Also, there are many characters interwoven with their own beliefs and ideals.

One more striking thing about the novel is it is dominated by the male characters while the female characters are presented as the passive recipients of the male actions.

Gustad is an aspirant man but his wishes and aspirations have been destroyed as the novel progresses. The sudden disappearance of Major Bilimoria from Khodadad apartment, Sohrab's refusal to join the IIT, a parcel of ten lakh rupee from Major Bilimoria, Dinshawji's illness and eventual death, Tehmul Lungraa's death, the perpetuating illness of Roshan - his daughter and the destruction of the compound wall by the municipality add to his misery and meaningless struggle for survival and achievement. Every moment of happiness leads to the element of sorrow and pain. Sohrab's refusal to join IIT at the ninth birthday party of Roshan strikes the imbalance in Gustad's life because from then on the father and son decides to live apart from each other. Gustad's misery increases as there is no one to share his sorrow, even his closest friend Major Bilimoria is missing. His hopes are refreshed when he receives a letter from Major Bilimoria to receive a parcel. This parcel entraps Gustad in great difficulties as it contains ten lakh rupees to be deposited in the bank account in the name of Mira Obili, a non – existent woman. The news of the huge amount of money spreads across creating more trouble for Gustad but somehow, with the help of Dinshawji, Gustad succeeds in depositing the amount in the bank but then Bilimoria wants the money back which is again a risky task. This event thus collapses Gustad's mind and happiness. Gustad feels betrayed and helpless.

The story of Major Bilimoria is based on a true incident. Though Bilimoria is not physically present in the actions of the novel

afterwards but he is alive everywhere in Gustad's memory because without him Gustad has lost his path and is struggling around to make meaning of his life out of all this hectic mess created by the people and situation around him. The news of Bilimoria's arrest on charges of corruption are published and this makes Gustad depressed and shocked. Betrayal is something which Gustad has never expected from Bilimoria but this news highlights the fear and uncertainty of Gustad's struggle. He is forced to somehow return the amount of ten lakh rupees within a month's time to save Bilimoria's life. Thus, it seems that Gustad's journey has become more complex and he is involved in more than one anxieties of his existence. Gustad is informed by Bilimoria that he is used as a scapegoat in this whole matter of money transfer and this matter is 'beyond the common man's imagination, the things being done by those in power.'(SLJ: 280)

During all these turbulence, his daughter Roshan's illness worsens and the doctor also insults him on the grounds that he might have modified the prescription. This situation contributes in the restlessness of Gustad. The novel not only expresses the existential angst of Parsis but also of various other minority communities. This angst is causing the loss of tradition and respect. The novel also describes the Parsi's growing poverty through Gustad as he is now not able to even by milk whereas his childhood had been very much affluent. But his hopes are now transplanted into his son Sohrab who in turn disheartens him all the while by not obeying him. Thus, from every corner of the existence Gustad finds betrayal and refusal. This adds to his existential angst as he feels that there is nothing left to hold on to and the world has

turned bleak and dark.

A FINE BALANCE : A STUDY of EXISTENTIALANGST

A Fine Balance (1995) also contributes to the existential angst of people belonging to different strata of society - the life of middle class and urban society, the world of young Parsis as a burden to lift and the life of the people of rural India. Again, the novel is set in the political backdrop of Emergency period in India. The novel explores the atrocities and suffering of the downtrodden people. The characters are from common areas of society having their own hopes and despair. The novel also tries to depict the struggle of lower class people against the capitalist system of social structure. The characters are not only struggling to survive with each other but also in the surrounding disparaged situation which has given them a fatal blow. In a way, the novel offers an insight on injustice, deprivation and cruelty.

The novel has four protagonists: Dina Dalal, Ishvar Darji, Omprakash Darji and Maneck Kohlah – a student. All these four characters have their own stories and as strangers they begin to live together but at last, they develop a bond among them. Dina is an independent woman. She loses her parents at a very early age and then also loses her husband Rustom Dalal. But then also she struggles to survive and emerges as a dressmaker with Om and Ishvar as her tailors.

The Emergency of 1975 plays a crucial role in creating and destructing the identity of these characters. Om and Ishvar's forefathers belonged to the lower caste and they had to go through the caste system hierarchy which angers these two children and so they decide to make their own identity by changing their profession.

Dina employs them but at the time of the evacuation of their slum quarter they are left on the streets and even Dina does not allow them to live with her. This is not the end of their suffering. The Emergency period slams more of it on them. Om is forcefully sterilized to be impotent and Ishvar who tries to prevent this act loses both his legs. At last, they turn into beggars – the worst of their existence is this stage. They are deprived of everything; even their identity is also snatched away from them.

In the case of Maneck loss of existence and identity occurs with the destruction of the forest when the government decides to connect hills with the city. The family is forced to migrate from their village. The city life does not attract him but while staying at Dina's apartment he develops a bond with Om and Ishvar as they also have a down to earth nature like him. But, Dina does not approve of this bonding. Thus, the novel entails many issues altogether in the framework of its plot such as, class struggle, identity crisis, historical and political issues, caste discrimination, social imbalance and poverty, etc.

CONCLUSION

Thus, the in depth study of both the novels, reveals the existential angst of not the Parsis in India and Canada but also within themselves. They are forced to adapt something which they are not ready for and in the process they lose so many things. Their struggle is multifaceted and involves assimilation by choice or by force in their adopted land. In short, Mistry is a writer who tries to show the concerns of humanity and the dying community – the Parsis; it seems that he is concerned with the 'humane' in the

humans. The novel also shows the suggestions for such issues. Only humans can accompany humans and this is what everyone is struggling to achieve through their existential journey of life.

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CHILDREN FORUM: A REPRESENTATIVE APPROACH FOR STRENGTHENING CHILDREN AND SCHOOLS

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ABSTRACT

Children Forum is relatively a new concept for post primary level in India. In democratic set up, the establishment of Children Forum is mandatory for raising their voices in schools, representing school children and for promoting schools. The Forum provides a platform to school children to represent issues of their concern before school authorities. It is not parallel authority to school authority or meant for finding out the weaknesses of school policies, like, their recruitment procedure, infrastructure development etc, but for raising issues concerning children within the school. The concern issues of Children Forum should be how to detain the drop out cases through encouragement of poor children, friendly behavior with new entrants, arrange fund generating club, may organize inter class competitions, like, mock parliament, dancing, singing, swimming, debating, quiz programs, other sports and cultural activities. The Forum may install canopy for free sale of second hand school dresses, books, winter clothes for street children and poor children of schools. The school authority must listen, encourage and give out the solution of the issues concern to the Forum. Here, the researcher has made an attempt to detail concept, role, activities and composition of the Forum and duties of office bearers. The researcher is hopeful that through active partnership between school authority, teachers, parents and students, the concept will work effectively for the benefit of children and school both.

Keywords: Children representation, school, Duty, Agenda, composition..

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1. INTRODUCTION

Children Forum is the delegate structure through which children may include in school activities from post primary classes onwards. They will get an opportunity to work together with school authority and staff and guardians for the advantage of the school. A Children Forum gives a chance to children to participate in schools with teachers, guardians and school principals in the activity of their school. Children Forums can enhance scholastic

guidelines and diminish dropout rates in schools. Children Forums can make a feeling of responsibility for school and its exercises among the children populace. It empowers children to assume liability for ventures, and to show that they can oversee and bring such activities to fruitful conclusion. Additionally, the commitment made by a Children Forum to the advancement of school approach in various territories can have critical advantages for children and the school. School strategies are

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unquestionably liable to be fruitful where they are obviously comprehended and acknowledged by all accomplices inside the school network. The children of a school will play the lead part in the foundation and task of a Children Forum. Overall, it is a democratic approach to convey their need, feelings and requirements to teachers and school authority, which they cannot fully understand.

2. THE ROLE OF CHILDREN FORUM

The main task of a Children Forum is—to take part in the school activities and to contribute the school with the coordination of teachers, school authority, guardian and other stakeholders. A Children Forum will set its own targets, which will change from school to class. Some broad objectives could include—to upgrade correspondence between children, authority, staff and parents, to elevate a domain helpful for instructive and self-awareness, to advance companionship and regard among students, to help the authority and staff in the improvement of the school, and, to speak to the perspectives of the children on issues of general worry to them. A Children Forum will distinguish activities that it might want to be associated with arranging, despite the fact that a ultimate conclusion on the exercises of a Children Forum ought to be concurred with school authority. Numerous schools that don't yet have a Children Forum may as of now have a settled class representative, official or tutoring framework. These rules don't require that schools replace built up rehearses that as of now function admirably with a totally new structure or set of methods. Rather these rules enable schools to adjust current practice to meet the prerequisites of the schools. In a few schools children assume an important help part for

school authority for instance by aiding the running of the school shop as well as library or keeping up arrange in passages amongst classes and amid breaks. These game plans for the most part have not been produced as delegate structures, and the activities included may not be proper to crafted by a Children Forum. School authority ought to consider deliberately which components of their current structures they will join with a Children Forum, and which may sensibly keep on running in parallel. The school organization gives that a Children Forum will act in co-activity with the School Authority, guardians and teachers. A Children Forum should not involve in the affairs of teachers, staff or school authorities. It is in this way not a component of a Children Forum to talk about or remark on professional issues or recruitment of teachers and experts, staff or school authorities.

2.1 SCHOOLAUTHORITYAND CHILDREN FORUM

The school authority will set up and keep up ways to inform children in a school of the exercises of the school. That will help children to set up a Children Forum. That will draw up rules for the foundation of a Children Forum which will accommodate the race of individuals and the disintegration of a Forum. That will have a part in considering the principles representing gatherings of the Children Forum, and the direct of its issues. Support and help with the foundation of a Children Forum can be given in different routes, for instance, by giving data as well as direction on the part and potential advantages of Children Forums, giving a space to children to meet to sort out the foundation of the Forum, enabling decisions to happen amid break time or class time, where this does not truly upset ordinary classroom work. It is for the

most part alluring for an teacher or parent to direct this procedure. Once a Children Forum has been set up the School Authority should give dynamic help to it. This could include assigning a teacher in the school or potentially a parent to coordinate with the Forum on a progressing premise, and additionally helping the Forum in drawing up a constitution and in arranging and sorting out its exercises. On the off chance that the estimation of a Children Forum is to be completely acknowledged, it will be critical that the School Authority includes the Forum in the improvement of school strategies in territories, for example, harassing, teach and uniform prerequisites, and in the arranging and School of school exercises and occasions. The foundation of Forum is not an end in itself, yet rather offers all concerned an upgraded method for building organization and viable interchanges inside the school. It is essential to pressure the requirement for a school authority to tune in to the Children Forum as well as to react genuinely to its worries. The primary accountability regarding the authority and activity of a school lies with the School Principal. The key responsibility of Children Forums is to promote interests of schools, representing children, and in improving life within the school community.

2.2 PRINCIPALAND CHILDREN FORUM

The role of Principal is of focal significance in the foundation and task of a Children Forum. In helping the School Authority in the improvement of school arrangement, and in working with teachers and guardians to actualize it at everyday level, the Principal is midway set in all parts of the school's activities. In the underlying stages, the Principal, together with alternate teachers, can aid the improvement of a Children Forum in a few different ways, for

instance, by examining with children the part of a Children Forum and the part of individual delegates on the Forum, by encouraging the holding of decisions and by exhorting on a fitting constitution or articulation of destinations. As the Forum creates, and starts to extend its part, the Principal will help with managing the Forum's improvement, in order to take into consideration a useful and deliberate Forum. The Principal can promote a school culture which perceives the possibly valuable information that children can make, to improve Children Forum in the interest of school.

2.3 TEACHERS AND CHILDREN FORUM

Building up a soul of association between a Children Forum and teachers has benefits for both. The Children Forum can assume an essential part in perceiving and supporting crafted by teachers. Correspondingly the intrigue and support of teachers will be of extraordinary incentive to a Children Forum, especially amid the beginning times of its improvement. It is for the most part attractive for an individual from the teaching staff to go to gatherings of the Forum. The help and direction offered by a teacher will be extremely valuable to Forum when arranging its exercises, and accommodating a teacher to go to Forum gatherings will build up a great working connection amongst children and staff of the school.

2.4 PARENTS AND CHILDREN FORUM

The Parents can make a huge commitment to the advancement of a Children Forum, by empowering and supporting children in the foundation of a Forum and by supporting the Forum in its emergence. A Children Forum may think that it's helpful to meet with individuals from the Parents every once in a while or to

welcome a parents' illustrative to go to Forum gatherings or to help it specifically exercises. This will guarantee great correspondence between the Children Forum and the Parents.

3. DUTIES AND A GENDA OF CHILDREN FORUM

The major agenda of the Forum are to retain the drop out cases through encouragement to drop out children, friendly behavior with new entrants, arrange fund generating club, may organize inter class competitions, like, mock parliament, dancing, singing, swimming, debating, quiz programs, other sports and cultural activities. The Forum may install Canopy for free sale of second hand school dresses, books, winter clothes for street boys and girls. The Forum may extend welcome or welcome party for new entrants, new teachers and staff. The Forum may also celebrate retirement party with teachers and staff. There are many more activities, which children may emerge as and when the need arises.

There is a wide range of activities of benefit to the school community which a Children Forum may wish to undertake, that follows:

3.1 REPRESENTATION OF SCHOOL CHILDREN

The basic duty of every Children Forum is to listen the problem and need of every fellow children at least of School. It includes talking and tuning in to the children body, thinking about their perspectives and concerns, and examining these with the school authority in the interest of the children.

3.2 ACCESS TO TEACHER AND PRINCIPAL

The primary responsibility of Children Forum is to make consistent communication and rapport with school principal and teachers.

Notice-board, Newsletter and presentation in staff meetings are the ways to communicate to their fellow children, principal and staff, and guardians about their activities and future plan.

3.3 CREATION OF DIALECT-CREATIVE INNOVATIVE CLUB

A Children Forum can add to the learning condition for children in the school by creation of study groups for children for examination or remedial classes or homework clubs, or sorting out noon exercises. Dialect clubs for reducing the pre-examination preparation for removing pressure of examination, for remedial classes for their weak fellow children and for creative and innovative activities.

3.4 WELCOME OF NEW ENROLLED CHILDREN

In every new session, it is the duty of Children Forum to warmly welcome new commerce. Avoid any type of ragging or harassment with new enrolled children. A tutoring program where senior children assist new children with finding their feet can help their incorporation into the school. Safety and security, and prevention from any sort of abuse is key responsibility of the Forum.

3.5 COORDINATION IN SCHOOL POLICY

The Children Forum can effectively add to the improvement of school arrangement in an extensive variety of zones, for example, harassing, uniform prerequisites, code of conduct, curricular and co-curricular activities. The Forum should set up advisory groups within the forum to discuss policy issues, to counsel with children, staff and guardians and to convey to the Forum's perspectives on those issues to the principal.

3.6 ASSISTING SCHOOLIN SPORTS AND CULTURAL SPORTS

Children forums can assist in organizing and developing sports activities and cultural activities in school, like, sports days and drama or musical events.

3.7 GENERATING CORPUSFUND

Children Forum can organize events inside and outside the school and related to the wider community, for the functions of raising money for designated charities and for meeting out day today expanses of the Forum

3.8 LIASONING WITH OTHER SCHOOL FORUMS

It might be valuable for a Children Forum to liase with Children Forums in different schools, especially in cultural and sports activities and for charity purpose. A Children Forum could have a valuable part in aiding and prompting a recently framed Children Forum in another school.

3.9 FUNDRAISING

Raising fund for certain activities is also a part of Children forum. The permission of school authority must be sought before planning any fundraising act for the school initiatives. The Treasurer has obligation for making sure that any cash raised by using the Children Forum is used for the functions for which it was accrued. The charter of the children discussion board ought to specify that a monetary record be supplied to the forum at the end of every financial year. A few examples of fundraising activities encompass:

Artwork, Exhibition, Cake sale, style show, holding a set, Jumble sale, Raffle, Non-uniform day, table Quiz, Sponsored activities

4. ESTABLISHMENT OF CHILDREN FORUM AND ITS BYLAWS

To establish a Children Forum, class monitor or some school boys should approach to class teacher and principal, should request for existing bylaws, in case not, then arrange a meeting with them for framing by laws. Parents, guardians and other stakeholders may also be involved in constitution of the Forum and its bylaws.

4.1 INITIATIVE OF CHOOL AUTHORITIES

The school authorities, especially principal, vice-principal and class teacher must motivate to constitute Children Forum in their school. They must encourage conducting election and appointing office bearers of the Forum. Office bearers must be assigned responsibility to lead in cultural and sports activities, annual functions and other school programs. Their members may be nominated in various meetings of policy issues of school. They must be encouraged to explore their genuine demands of school children to facilitate in best possible manner. The principal must arrange some premises to the Forum for their regular meetings and discussion in democratic set up. This is the best way how weaknesses of the school may be identified and may be improved henceforth.

4.2 ENCOURAGEMENT THROUGH PARENTS' FORUM

The parents and guardian should believe in their children, and provide required time in constituting the Forum and making its bylaws. They must encourage in participating in election. Gone of the days, when it was a assumption that only academic activities may lead to acme of success, but in current scenario there is a need to involve the child in various

cultural and sports activities for making integrated and complete personality. Child Forum is one of the tool exploring needs, to understand fellow children, how to communicate and respect teacher, principal, guardians in meeting, how to present oneself before educated gathering, how to eliminate social phobia, meta cognition activities—what to think and how to express one selves.

4.3 COMPOSITION AND BYLAWS OF CHILDREN FORUM

The school authority should prepare bylaws for setting up Children Forum and its bylaws, process and procedure. Bylaws for conducting of elections should also be ready. Bylaws of the Forum should be—what should be the designation and duties of office-bearers, what should be the tenure of the Forum, what should be the eligibility criteria for voters and contesters, how many meetings and how many hours the Forum may take out from school timings? The school authority will decide the term of office of elected members; the authority will also decide whether a teacher or principal is to be included as a nominating member in the Forum. The bylaws should be approved after meeting with school authorities, parents, guardians, children representatives and educationist. It must be approved written and must be circulated to document concerned, display at school notice board and upload on school website.

5. ELECTION AND VOTING

Voting meeting or election of the Forum may be conducted during recess or after school timings or weekends or in summer or winter vacations subject the approval granted by school authorities.

The school authority should appoint a chief election officer and an observer from list of

senior teachers or from outside school for unbiased election. Election should be conducted through ballot papers and counting of votes should be conducted in presence of children under nomination, parents, guardians and senior teachers. Result should be declared same day in evening hours.

6. ELECTED OFFICE BEARERS AND THEIR RESPONSIBILITIES

After election, the elected office-bearers, if designated, President, Vice-President, Secretary, Joint Secretary, Treasurer, take charge. After oath ceremony, they shall conduct their first meeting, whereupon they shall raise the issue of their concern, plan and prepare a representation with the signature of all members to present before school authorities and shall take time to meet and discuss the issues. If there is heavy work load, the Forum can constitute committees and share some work to it, like, fund raising issues and conduct of cultural activities. The responsibility of each office bearer is as follows:

6.1 PRESIDENT

The president is accountable for presiding over meetings of the forum. The president, with the secretary, prepares the agenda for every meeting and, approve when they have been agreed by means of the Forum. The decisive vote is with president, In case of, equal votes, the president usually has the casting vote. Usually, the president is assigned to represent the Forum before school authorities.

6.2 VICE PRESIDENT

The role of vice president is to assist the president. In the absence or death or leave or leaving the post, vice president assumes charge of president and convene the meeting and regulate the session.

6.3 SECRETARY

The secretary, in consultation with the president, prepares schedule and agenda for each meeting and circulates among office bearers and members of the Forum. The secretary maintains a record of previous meetings and prepares the minutes of current meeting. The meeting is also convened by the secretary on behalf of president.

6.4 JOINT SECRETARY (PUBLICITYAND ORGANIZING)

Usually two joint secretaries, one for publicity and one for organizing the event are elected. The responsibility of joint secretary (publicity) is to publicize the activities done and result achieved by the Forum, whereas joint secretary (organizing) is responsible for arrangement of any event.

7. CONCLUSION

The Children Forum is representative of children in the school. Children form is the best way to fill the gap between children and school authorities. There are various concerns and issues of children which teacher, parent and school authority cannot understand due to big generation and technological gap. Psychologically, a child can better understand and convey his or her urge, need, and demand to same age group in Children From under democratic set up. The Forum is also the tool for making children vernacular and jack of all trades. The primary duty of the Forum is to identify the problem of each and every child and sort out with the coordination of teachers and school authorities. Their concern is also to explore the best ways to facilitate the children in the interest of school. The Forum can also discuss upon academic issues, like, what content they want to learn, what pedagogy should be

used in classroom and outside the class, school timings, curricular, co-curricular and extracurricular activities etc. The Forum can chalk out schedule, timings, theme and procedure of sports and cultural activities, national festivals and annual functions etc. Thereby, the school will produce the best nationals having both practical and theoretical knowledge, full of sports and team spirit, fit in heterogeneous and multicultural society. The Children Forum is just like a mini parliament of school, which has its eye on every activity of the school. This is the best way how weaknesses of the school may be identified and may be improved henceforth.

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CHILDREN'S LITERATURE AND INDIAN SUBCONTINENT

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The term Children's Literature is loaded with multiple nuances and to begin the unpeeling of these many layers calls for the deliberation on its range, types and availability in different literary traditions. As far as the literary history of Indian subcontinent (that necessarily includes the present day India, Bangladesh, Pakistan, Sri Lanka, and Nepal) is concerned, the term has modern relevance to its antique status. To begin with its historical implications and its vividness in terms of scope demands the discussion of its region specific dimension and hence when one looks at it in the specific context of the Indian subcontinent, it is certainly improbable to undermine and overlook its rich traditions of folklore, myths, legends, and tall tales as the sacred fountain of traditional literature. The oral tradition of Children's Literature goes back more than five thousand years, and the world's oldest collection of stories for children, India's Panchatantra, derives from this. In the case of India, though children are treated as the nucleus of family, literary scenario contradicts this pattern. The concept of Children's Literature as a distinct literary category has its origin in the Occidental tradition and by the time it arrives in its Eastern counterpart, the functionality of its purpose and the modalities of its frame attain a mayerick flavor.

As far as the development of Children's Literature in the sub-continent is concerned, it has witnessed, as Meena Khorana observes in her seminal work, three distinct phases till the date. (Khorana: 29) Initially, the stories from the oral tradition, mythology, religion, folk-tales, legends and classics were adapted and rewritten. Then there were translations and adaptations of material already published in England and other European countries and also in different native languages. Writings specifically meant for children centering joy alone is a recent phenomenon. With increasing literacy level and implementation of international standards of education, problems like the multiplicity of languages, lack of demand, poor purchasing power and high production costs, lack of library facilitation have been dedicatedly controlled. The increased interest in the development of indigenous literature for children has led to the organization of seminars, conferences and training programmes in the subcontinent. Institutions and organizations to promote literature for children have been established.

With the benefits of the linguistic diversity in India, the production and expansion of Children's Literature requires a strong historical observation. For example, *Panchatantra*, assigned to Vishnu Sharma to teach *niti* (the wisdom of governance) of which 'The Monkey

and the Crocodile', 'A Blue Jackal', and 'The flight of Pigeons' are widely known and widely translated stories. With religious diversity and religion-oriented *stories Kathasarit Sagar*, *Jatak, Katha Puran*, epics of *Mahabharat a* and *Ramayana* and other classics have also been a perennial source of children' stories. However, in this article, an attempt to overview four major linguistic or regional contributions to the oeuvre of Children's Literature is at its centre and the first among them is the case with the English literary tradition.

A Case with English Tradition:

Behind the excellent success and reach of English children's stories the following factors are responsible i.e., the quality of writing, illustration, book design and overall production in English language, and owing much to the foundation of Children's Book Trust (CBT) in 1957 by K.Shankar Pillai. (Kimberley: 13) CBT brought out its first set of two illustrated books in 1961: Kings Choice (English) written by K.Shiv Kumar and illustrated by Reboti Bhushan, and Varsha Ki Boond(Hindi) by Kusmawati Deshpande and illustrated by K.K. Hebbar. India's first picture book Home (English) written by Kamla Nair and illustrated by K.S. Kulkarni was published by CBT in 1965. The same year CBT also published Life with Grandfather and Sujata and the Wild Elephant, both written and illustrated by Shankar. The first picture book for pre-school children Three Fish written by Dolat Doongaji and A.K. Lavangia, and illustrated by Pulak Biswas was published by CBT in 1966. The first adventure story in an Indian setting in English for teenagers was Kaziranga Trail by Arup Kumar Dutta, published by CBT in 1979. Among other publishers in the English language

is the National Book Trust (NBT), a government-owned institution, publishing common reading material in Indian languages including English and Hindi since 1969 under the Nehru Bal Pustakalaya Scheme. (Hanh: 138) There are several magazines for children in English and the prominent ones are Children's World, Champak, Junior Quest, Tamasha, Tinkle and Target, etc. Among the well-known writers in English are Ruskin Bond, Mulk Raj Anand, Shankar, Manorama Jafa, Arup Kumar Dutta, Nilima Sinha, Kavery Bhatt, Pratibha Nath, Vernon Thomas, Dilip Salwi, Ira Saxena, Deepa Agarwal and Manoj Das.

A Case with Hindi Tradition:

The history of Children's Literature in Hindi can be traced back to the riddles in verse written by Amir Khusro in the fourteenth century. In the nineteenth century, Raja Shivprasad wrote many books: the better-known ones are Bachchon Ki Kahani (1867) Raja Bhoj Ka Sapna (1876) and Larkon Ki Kahani (1876). The Hindi writers took full advantage of the source material like the Panchatantra, Ramayan, Mahabharat and the legends. In the early twentieth century, a number of well-known writers began to write for children. Premchand wrote "Kutte Ki Kahanian" and "Jungle Ki Kahanian", Sohan Lal Dwivedi's collection of poems, Balbharti, and Bigul and other patriotic poems earned instant popularity. During this period, several magazines also came out; the foremost of these were Vidyarthi (1914), Shishu (1915) and Balsakha (1917). The first full-length fiction for children was Khar Khar Mahadev by Narain Dixit, which was serialised in Balsakhain (1957). At present, well known children's magazines are Nandan, Champak, Balbharti, Balhans and Chakmak. Some of the best-known

Hindi writers are Shyam Narayan Pande, Ram Naresh Tripathi, Subhadra Kumari Chauhan, Nirankar Dev Sewak, Vishnu Prabhakar, Vyathit Hridaya, Harikrishna Devsare, Swarna Sahodar, Manohar Verma, Sri Prasad, Shakuntala Sirothia, Jai Prakash Bharti, Nilima Sinha, Ira Saxena and Manorama Jafa.

A Case with Bengali Tradition:

The first magazine for children in India, Digdarshan was published in Bengali under the editorship of John Clerk Marshman, by Serampore Press in 1818. (Grenby: 47) An important tradition in Bengali is that a large number of those writing for adults have also written for children, unlike writers in any other Indian language. Nineteenth century Children's Literature was based largely on traditional and oral literature. In 1847, Ishwarchandra Vidyasagar, a teacher by profession, translated Betal Pancabinsati [Hindi: Betal Pachchisi]. Tagore has a famous poem for children Bisti Pade Tapur Tupur, Nadey Eloban, which was published in Balak, and Birpurush, a long poem with an illustration by Nandalal Bose. In 1919, Abanindranath wrote Barngtarbratn, Sukumar Ray wrote and illustrated a collection of nonsense rhymes, Abol Tabol. His father had launched a children's magazine Sandesh, which was discontinued after Sukumar Ray's death. His son Satyajit Ray, the well-known film maker, restarted and edited Sandesh, and encouraged almost all the modern writers for children. It is one of the most reputed magazines in Bengali. He edited Sandesh together with Lila Majumdar and Nalini Das. Satyajit Ray wrote and illustrated a number of books and liked to illustrate his own stories. His notable books are Gupi Gayen Bagha Bayen and Sonar Kella and Prof Sanku.

A Case with Gujarati Tradition:

Gujarat has an abundance of literature for children based on folklore. There are also plenty of translated books from other languages. In 1860, Batris Putlini Virta was written by Baji Bhai Amichand. During the third decade of the twentieth century, Gijubhai Badheka started periodicals, Sikshan Patrika and Dakshinamurthi. He himself published 150 books for children of which eighty books were published in the series Bal Sahitya Mala, of which Badheka's stories are most popular. Hariprasad Vyas wrote Bakore Patel (1938). Jivram Joshi created humorous stories around new characters and published Miyan Fuski and Chhako Ane Mako. Among other well-known writers are Uma Shankar Joshi, Pannalal Patel, Labhuben Mehta, Nagardas Patel, Mulshankar Bhatt and Hansaben Mehta.

A Case with Marathi Tradition:

Panchopakhyana, a translation of Panchatantra was published in Marathi in 1825 by Mumbai Hind Shikshan Mandali. Children's Literature in Marathi was influenced mainly by works in English; H.K. Damle translated several books from English. V.K.Oke wrote many original books— Hindusthan, Katharaja and Mahamanimala. N.D. Tamhankar's Gotya (1940), a novelette, was published in the magazine Khelgadi. Tarabai Modak wrote original nursery rhymes and stories, Sane Guruji's ShamachiAai is considered an outstanding book. B.R. Bhagwat's best-known titles are Chandravara Swari, and Jaichinaval Kahani, D.S. Desai wrote Saha Sahase and Jayant Narlikar wrote several books of science fiction. Antaril Visphotis Narlikar's most recent book. R.K. Atre wrote a play, Guru Dakshina. Ratnakar Matkari, Sai Paranjpe and Sudha

Karmarkar have also written plays. Among popular writers are Sane Guruji, Tara Bai Modak, Jayant Narlikar, N.D. Tamhankar, V.G. Apte, B.R. Bhagwat and his wife Durga Bhagwat.

Thus, the range and scope of Children's Literature has a variety of themes and forms as far as Indian subcontinent is concerned. The form is received well and also provides the novelty in terms its techniques of narration and illustration. To sum up, it is imperative to note that the methodology of writing for Children consists of impressive literary history and it calls

for the further deliberation on its theoretical frame.

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ENVIRONMENTAL AWARENESS: AN AFFECTIVE GOAL OF SCIENCE EDUCATION

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ABSTRACT

Aim of education is the all round development of the learners. The all round development can be attained by providing the learning experiences in all the three domains which are Cognitive, Affective and Psychomotor. Although researches indicate the importance of affective science education, it can be seen that less attention is paid towards it in present educational system. Awareness among the people to utilize science for betterment of world with a conscious care of nature is one important affective goal of science education. Awareness about nuclear energy and issues related to it can be included under the broad concept of scientific awareness. It is needed to emphasize on affective side of science education to make it more humanistic, where students can participate in scientific issues related to society. The attainment of such awareness is possible only if it has been gained since childhood. Are the children getting opportunity to gain such awareness through formal and informal education? This theme paper is focused to discuss the same question by elaborating present status and possibility of inclusion of scientific awareness in science education.

Key Words: Science Education, Affective Domain, Scientific Awareness, Nuclear Energy * Author for correspondence

1. INTRODUCTION:

Modern Science Education is emphasized to make its learner a 'Scientifically Literate Person'. As per National Science Education Standards (NSES) – 1997 adopted in America, scientific literacy is required for participation in civic and cultural affairs, and economic productivity. In India National Council of Educational Research and Training (NCERT), a reputed guiding authority to the nation for school curriculum designing has defined learning indicators and outcomes of science education. Some of the learning indicators given

by the NCERT for science education at upper primary level are related to encourage the learners to provide meaningful scientific reflections in social context, and to engage them in sustained discussion on scientific issues. When it is matter of participation of the learners in discussion on scientific issues, one important area in which we need to strengthen them is 'Scientific Awareness'. The scientific awareness makes a learner to cultivate a habit to utilize science with a conscious care of nature. Such awareness also helps him to think over the socio—economic - scientific issues like nuclear

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power production without being biased just by science or society. Enrichment of such awareness among the learners of science is again an important factor of scientific literacy and hence becomes a prime aim of science education.

Once sharing his views on need of nuclear energy in our country the missile man APJ Kalam said that nuclear power is our gateway to a prosperous future. It is needed to increase the share of nuclear energy in the total energy production in India. If we wish to move ahead on power generation by means of nuclear energy certainly there will be some human resistance. The resist of nuclear energy from the people with partial knowledge can be made less intense by awareness programs. But we know that it is not that much easy to aware an adult on any issue than a child, so we need to spread the awareness among the young generation during their education to think over such socio - economic scientific issues. As environmental awareness imbibing the nuclear and atomic energy awareness within it is one of the attentions of science education, we need to explore present science and technology textbooks' content and school based science activities carried presently to know that how are they matching the learning indicators. Not only that as the education is accepted as everlasting process, we also need to explore the informal sources providing such awareness among the school learners as well as in civilians.

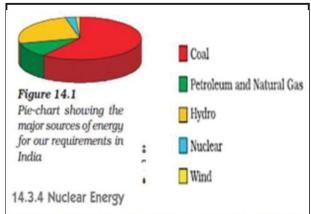
2. COVERAGE OF 'NUCLEAR ENERGY AND RELATED ISSUES' IN OUR TEXTBOOKS:

In Science Education environmental awareness is accepted as one of the learning

indicators. Gopal and Anand (n.d.) identify encouragement of students to examine and interpret the environment from a variety of perspectives (like physical, geographical, biological, sociological, economic, political, technological, historical, esthetic and ethical) as the aim of environmental education. However the textbooks based on National Curriculum Framework (NCF) -2005 cover the concepts of knowledge of sources and types of energy including nuclear energy from primary to secondary education, found to be less concentrated on the nuclear energy and the issues related to it. The coverage of nuclear energy and related concepts in the textbooks used nationwide and prepared by NCERT, and in the textbooks prepared by Gujarat Council of Education and Training (GCERT) or Gujarat State Board of School Textbooks used in Gujarat is as shown here.

2.1 COVERAGE IN NCERT BOOKS:

In the Science and technology Textbooks from standard 6 to 9 no points related to nuclear energy are elaborated. In the text book of standard 10 under the chapter 'Sources of Energy' a graphical presentation of nuclear energy share in India is given. Under the title of 'Alternative or Non-Conventional Sources of Energy' the concept of nuclear energy and its hazards are covered in just 3 small paragraphs. There is no discussion of nuclear energy and related concepts in the textbooks of Physics textbooks of standard 11. In the Physics textbooks of standard 12, the concepts of nuclear fusion and fission with equations are given. The energy generation by nuclear reactor is shown with diagram. India's three stage atomic energy program is also given in box item.



How is nuclear energy generated? In a process called nuclear fission, the nucleus of a heavy atom (such as uranium, plutonium or thorium), when bombarded with low-energy neutrons, can be split apart into lighter nuclei. When this is done, a tremendous amount of energy is released if the mass of the original nucleus is just a little more than the sum of the masses of the individual products. The fission of an atom of uranium, for example, produces 10 million times the energy produced by the combustion of an atom of carbon from coal. In a nuclear reactor designed for electric power generation, such nuclear 'fuel' can be part of a self-sustaining fission chain reaction that releases energy at a controlled rate. The released energy can be used to produce steam and further generate electricity.

The major hazard of nuclear power generation is the storage and disposal of spent or used fuels – the uranium still decaying into harmful subatomic particles (radiations). Improper nuclear-waste storage and disposal result in environmental contamination. Further, there is a risk of accidental leakage of nuclear radiation. The high cost of installation of a nuclear power plant, high risk of environmental contamination and limited availability of uranium makes large-scale use of nuclear energy prohibitive.

Nuclear energy was first used for destructive purposes before nuclear power stations were designed. The fundamental physics of the fission chain reaction in a nuclear weapon is similar to the physics of a controlled nuclear reactor, but the two types of device are engineered quite differently.

Snap 1: Content in NCERT STD 10 Text Book

2.2 COVERAGE IN GUJARAT STATE BOOKS:

In Gujarat the textbooks used in standard 6 to 8 are prepared by GCERT and in the standards 9 to 12 are prepared by Gujarat State Board of School Textbooks. Out of eleven textbooks of standard 6 to 11 only in books of standard 7 and 9 points like atomic energy, its uses, benefits – limitations and hazards of radiations are given. In textbook of standard 7, an activity of discussion on Japan's Fukusima Daiichi is

given, which can be related with the indicator of participation in environmental issues by the students. In standard 9° textbook of Sem - 2 in the chapter titled 'Work, Energy and Power' the concept of nuclear fission in given in very brief.

ન્યુક્લિયર ઊર્જા (Nuclear energy) : ન્યુટ્રૉન, પ્રોટોન જેવા સુક્ષ્મ કણો 10⁻¹⁵m ના ક્રમના અંતરે એકબીજા સાથે આંતરક્રિયા કરે છે અને ન્યુક્લિયસની રચના કરે છે. ન્યુક્લિયસનું દળ તેમાં રહેલ ન્યુટ્રૉન અને પ્રોટોનના મુક્ત અવસ્થામાં કુલ દળ કરતાં ઓછું હોય છે. દળના આ તફાવતને સમતુલ્ય ઊર્જા ન્યુક્લિયર ઊર્જા અથવા ન્યુક્લિયર બંધન-ઊર્જા કહે છે. યુરેનિયમ જેવા ભારે તત્ત્વના ન્યુક્લિયસ પર ન્યુટ્રૉનનું પ્રતાડન(મારો) કરવામાં આવે ત્યારે યુરેનિયમના ન્યુક્લિયસમાં તે શોષાઈ જાય છે અને અસ્થાયી બને છે. આથી અસ્થાયી બનેલા સંયુક્ત ન્યુક્લિયસ (યુરેનિયમ + ન્યુટ્રૉન)નું બે લગભગ સરખા ભાગમાં વિખંડન થાય છે અને અમુક ન્યુટ્રૉન ઉત્સર્જિત થાય છે. આ પ્રક્રિયામાં વિપુલ પ્રમાણમાં ન્યુક્લિયર ઊર્જા મુક્ત થાય છે. આ પ્રક્રિયાને ન્યુક્લિયર ફિશન (Fission) કહેવામાં આવે છે. પરમાણુ બૉમ્બ (Atom bomb)માં આવી પ્રક્રિયા થાય છે. ન્યુક્લિયર રિએક્ટર (Nuclear reactor)માં પણ આવી પ્રક્રિયા નિયંત્રણ હેઠળ થવા દેવામાં આવે છે.

હલકા ન્યુક્લિયસ જેવાં કે હાઇડ્રોજન, ડ્યુટેરોન ઘણા ઊંચા તાપમાને જોડાઈને હિલિયમ ન્યુક્લિયસ બનાવે છે. આની સાથે પણ ન્યુક્લિયર ઊર્જા છૂટી પડે છે. આ પ્રક્રિયાને ન્યુક્લિયર સંલયન(Nuclear fusion) કહે છે. સૂર્ય તથા તારાઓમાં સતત ઉત્પન્ન થતી ઊર્જા આવી પ્રક્રિયા દ્વારા જ મળે છે.

Snap 2: Content in STD 9 Text Book (Gujarat)

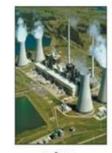
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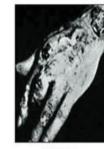
- ખૂબ જ ઓછા જથ્થાના યુરેનિયમમાંથી વિપુલ પ્રમાણમાં ઊર્જા મળે છે.
- આ ઊર્જાસ્રોતના વપરાશથી કાર્બન ડાયોક્સાઇડ જેવા વાયુ-પ્રદૂષકો ઉત્પન્ન થતા નથી.

મર્યાદાઓ:

- પરમાણ્વિક ઊર્જા માટે જરૂરી એવું યુરેનિયમ પૃથ્વીના પેટાળમાં ખૂબ અલ્ય માત્રામાં છે.
- પૂરતી કાળજી લેવામાં ન આવે કે પછી ભૂકંપ, ત્સુનામી જેવી કુદરતી હોનારતના લીધે જો પુરેનિયમમાંથી વિકિરણનું લીકેજ (ચુવાક) થાય તો પર્યાવરણ તેમજ માનવ સહિતના સજીવો પર અતિ ગંભીર અસરો થાય છે. આ અસરો લાંબા ગાળાની હોય છે.
 - વિકિસ્લો

હાલમાં પરમાણુશક્તિનો વિવિધ કાર્યમાં ઉપયોગ થતો હોવાથી કિરણોત્સર્ગી પ્રદૂષણ વધવા લાગ્યું છે. પરમાણુબોમ્બ જેવા શસ્ત્રોના પ્રયોગોથી વાતાવરણમાં હાનિકારક વિકિરણો કેલાય છે. અણુવીજમથકો તથા પરમાણુબકીઓ દ્વારા નીકળતા કચરામાંથી પણ આ પ્રકારનું પ્રદૂષણ કેલાય છે.





આકૃતિ 10.5

આકૃતિ 10.6



જાપાનમાં કુકશીમાં અભુમથક પર બનેલ ઘટનાની ચર્ચા તમારા શિક્ષક સાથે કરો અને નોંધો.

Snap 3: Content in STD 7 Text Book (Gujarat)

In the textbook of physics of standard 12 concepts of nuclear chain reaction and nuclear reactor are explained with diagrams and equations. The hazard of 'Nuclear Winter' is also introduced in one line.

3. SCHOOL ACTIVITIES: AWARENESS OR FEAR?

The schools are guided to form science clubs to conduct various science activities and celebrations of different days. Some of the schools initiated to give a talk on Hiroshima –

Nagasaki day with some visuals to the children. Generally during such talks the children come across the destructive power and hazardous nature of the nuclear energy as they see some images of Japanese people and places affected by the atomic bombs and their post effects. During such talks they can connect the points given in their textbooks about nuclear hazards. Gradually the activities introduced for nuclear awareness lead the children to believe that nuclear energy is so hazardous that somewhen it will take us to the doomsday. There can be a scope to aware people on nuclear energy during the science exhibitions conducted at various levels in the state and nation, but rarely a team coming with such idea has been seen during the science exhibitions.

4. NUCLEAR ENERGY AWARENESS IN STUDENTS AND SOCIETY THOUGH SOURCES OTHER THAN THE SCHOOLS:

The Schools are addressing the awareness regarding nuclear energy within a circle of limited radius due to their less technical knowledge about nuclear energy. In this situation the institutes working specially in the sectors of science education and nuclear power production like Science Centers and Nuclear Power Corporation of India Ltd. (NPCIL) play a major role to spread the nuclear energy awareness in the students and the society. Again the media plays vital role while addressing nuclear energy awareness nationwide. But the media can mislead the people by generally highlighting the destruction power of nuclear weapons by comparing its range and capacity with other countries' artilleries. In news examples of some countries reducing share of nuclear energy by shutting off the nuclear power

plants are given which may guide the people to wrongly justify the need of rising the nuclear power generation in India.

Looking at all these circumstances the NPCIL has to take the lead to aware the people regarding the nuclear energy need and challenges to us.

5. NPCIL ACTIVITIES FOR NUCLEAR ENERGYAWARENESS:

The NPCIL is doing the work of production of nuclear energy as well as reaching the public effectively and spreading awareness among them regarding the nuclear energy. The NPCIL is conducting various activities like 1.Rallies 2.Film shows 3.Lectures followed by interactions 4.Quiz Competitions 5 Display of Comics and animation series 6.Drawing Competitions 7.Craft Making Competitions 8.Essay Writing Competitions trough out the year and across the country. The NPCIL is also taking part at state level science exhibition by setting up its stall and aware a huge number of visitors. The NPCIL also emphasize on vernacular languages to make an effective public outreach and to spread the news related to its activities among the people those regions.

6. WHAT CAN BE INCORPORATED IN OUR TEXTBOOKS?

At present our textbooks includes the points like definition of nuclear energy, nuclear chain reactions, working of a nuclear reactor and nuclear hazards. Some statistical highlights, fact figures and descriptions should be included in the textbooks answering questions like these:

- 1. What is current and projected (say in 2020) need of energy in our country?
- 2. How nuclear energy can fulfill the future energy need of country?

- 3. What is the rank of our country in nuclear power generation?
- 4. How many nuclear power plants are in our country and what amount of power they are generating?
- 5. What is the cost effectiveness of a nuclear power plant in comparison with a traditional power plant generating the same amount of energy?
- 6. What are the safety standards adopted and fulfilled to avoid any undesired situation?
- 7. What are the environmental changes occurred in the vicinity of the nuclear power plants?
- 8. What type of problems occurred at any of the plant right from the first power plant till today?
- 9. Did we face any disaster? (If the answer is in a precise no then this success can be highlighted)

7. CONCLUSION:

Being a developing country our energy requirement will remain high. To cop up this demand we need more efficient energy production which is in current situation is the nuclear energy. Though it has some hazards, looking at the need of the country, we must aware the people to accept this clean and green energy. This can be done best by spreading the awareness since school education. The present textbooks from standard 6 to 12 offer very less coverage to the nuclear energy awareness. The textbooks theoretically must be factual so it is necessary to include the nuclear hazards in texts but the benefits of the nuclear energy also be highlighted. In our textbooks the concept of nuclear energy should included right from the beginning of upper primary and awareness

related to it should be inculcate hierarchically. As per Han's (2015) research finding the nuclear power education is an effective way to change the level of awareness and attitude of school children positively, the interactions of school children should be made more frequent and wide with institutions like science centers and NPCIL to have some concrete outcomes related to nuclear energy awareness.

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