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# Innovative Pedagogy in Transforming Science Education

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> A growing revolution is under way in the teaching of science to undergraduates. It is driven by concerns about Indian competitiveness as well as results from recent educational research, which explains why traditional teaching approaches in large classes fail to reach many students and provides a basis for designing improved methods of instruction. Discipline-based educational research in the life sciences and other areas has identified several innovative promising practices and demonstrated their effectiveness for increasina student learning.Innovation pedagogy is "a learning approach focused on the development of innovation competences, defining how knowledge is assimilated, produced and used in a manner that can create innovations". Innovation competences are learning outcomes that refer to knowledge, skills and attitudes needed for the innovation activities to be successful. The humanistic way of understanding people as the creators of their own future forms the philosophical foundations of innovation pedagogy.

Keywords: Innovation, Education, Learning and Internationalisation.

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# Innovative Pedagogy in Transforming Science Education Introduction

The concept of innovation pedagogy is a didactic operational model based on the socio-cultural perception of learning that supports the work of universities of applied sciences as a part of regional competence and innovation networks. Applied research and development activities that support regional development and the production of innovations in working life are integrated into multidisciplinary teaching in accordance with the principles of The education innovation pedagogy. offered bv the university promotes entrepreneurship and includes service activities while taking into account both the needs of the region as a whole as well as the constantly changing trends of working life.

Learning environments where students of different fields are daily in contact with each other offer new interfaces for working. Such surroundings are known to be best when innovations are expected. In addition, an innovative approach to teaching and learning are also needed as well as enthusiasm for trying new methods. In the context of innovation pedagogy, innovations are seen as an integral part of the process of constantly improving know-how as well as generating new sustainable ideas and practices applicable in working life. A fruitful environment for innovation consists of individuals with different backgrounds working together on similar problems. These innovation communities can be tight teams meeting every day or network-like looser communities. The success of the communities is based on know-how and sharing knowledge as well as on the ability to combine different points of view and approaches. Innovations are more frequently generated where different fields of expertise meet.

Thus, the aim of innovation pedagogy confesses the societal needs as the basis for the work done at HEIs. Having social learning theories as a background, innovation pedagogy links university work together with the regional needs emphasising the meaning of innovation competencies without forgetting the study specific skills students must have. Innovation pedagogy emphasises the meaning of teamwork and multidisciplinary groups, as well as internationalisation as main sources of innovations and especially as core competencies which a today's innovator should have. Innovation pedagogy is put into practice via different activating learning methods such as hatchery methods that produce study specific and innovation competencies, and simultaneously serve regional, national and international operators ensuring direct societal benefits.



Various Types of Innovative Pedagogy

- Sensitization of Parents and Community
- Organized visits to Science Museums, Innovation hubs and Science fairs and Mathematics Melas
- Participation of Students in Inter-school, State/ National Science and Mathematics competitions/ Olympiads etc.
- Expand outreach of programmes of Ministry of Science and Technology to promote science learning
- Science, Mathematics and Technology Clubs for Children
- Promotion of Science & Mathematics Teacher Circles
- School Mentoring
- Effective Classroom transaction: teaching -learning
- Strengthening teacher support institutions through use of technology
- Development of Resource Materials
- Use of Technology in Science and Mathematics teaching
- Provision of Teaching-learning equipment and materials
- Strengthening School Science and Mathematics Laboratories
- Recruitment of Science and Mathematics Teachers
- Assessment Design for Science and Mathematics for students
- Teacher Preparation for Science, Mathematics and Technology

# Sensitization of Parents and Community

Government will contribute to nurture SMT talent among children through right attitudes through following activities viz.,

- Promotional communication strategy to sensitize parents and society on Science and Mathematics education in an increasingly knowledge-based society through mass media.
- Community-Scientist interactions at six monthly intervals using TV, Radio and other technologies.
- Engagement of parents in Classroom teaching at school level.
- Invitation of parents and community leaders in Science and Mathematics events/ activities of schools
- Parent-Science & Math teacher meetings
- Engage Civil Society / NGOs working on Science and Mathematics (selected based on set norms by State/ National level Mentoring Institution) in popularizing science and mathematics.

## Innovative Pedagogy in Transforming Science Education

Organized Visits to Science Museums, Innovation Hubs and Science Fairs and Mathematics Melas

- Guided student visits to local vocations/ activities involving traditional and modern science and technology viz., Cycle / Car / Road Transport/Rail/Ship yard workshop, Diary, agriculture, field irrigation system, Bakery, community radio/ TV station, zoo, power stations, telephone exchanges etc.; and Science Museums/ Parks/ R&D centres/ Institutions of /Higher Education/ Industry etc.
- Planned visits to Science Museums and Innovation hubs under mentorship of Higher Education Institutions/ UG or PG Students of Engineering or Science / Mathematics students.
- Visits to Science fairs and Mathematics Melas organized locally

Participation of Students in Inter-School, State/ National Science and Mathematics Competitions/ Olympiads etc.

- Under schemes of the MHRD, schools, students would be encouraged to participate in programmes and events that promote Mathematics and Science awards and incentives for children. The effort would be to take these programmes/events to decentralized levels to ensure greater wider participation and involvement of teachers and children as well as ensure greater & wider participation of children in competitions and awards.
- MHRD, NCSM, Nehru Yuvak Kendras & DST will work together to encourage following greater participation of children in the events:

# Events

- National Children Science Congress
- Teachers Science Congress
- Competitions for Science & Innovation at State/district level
- Maths and Science Olympiads
- IRIS Intel Programme
- ISRO Science Competitions
- Citizen Science Programme
- MHRD, NCSM, DST (VP) & Nehru Yuvak Kendras would also collectively work for the following
- Formation of Science Clubs in all Schools in phases, in partnership with Vigyan Prasar.
- Subscription/ Membership in Science Clubs/ Circles

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• Encouraging students to write Science communication articles in local media based on self- observation, experience and analysis.

Expand Outreach of Programmes of Ministry of Science and Technology to Promote Science Learning

Expand outreach of programmes of Ministry of Science and Technology and National Council of Science Museums (NCSM) for school children, to cover schools across the country and for wider participation of children. The schemes of MHRD, SSA and RMSA would enhance the outreach of DST and NCSM programmes to all Govt. Upper Primary Schools and all Govt. & aided Secondary schools as per approved norms.

- DST's Scheme for Early Attraction of Talents for Science (INSPIRE) involving identification of students of classes 6-10 of age group 10-15 years, for INSPIRE awards to seed and experience the joy of innovation with Rs.5000/ per child (one time grant) would be popularized across schools to enable greater participation from all schools.
- INSPIRE Internship School camp for the top 1% students in Class X examination of all School boards would also be popularized and all secondary schools encouraged to participate and compete.
- NCSM Innovation hubs will be actively involved in student engagement and long-term handholding.

Science, Mathematics and Technology Clubs for Children

MHRD in partnership with Vigyan Prasar (DST) and National Council of Science Museums (NCSM) will assist schools in a nationwide effort to institutionalize science clubs for students in schools for Science and Mathematics. Mentoring Institutions will play a lead role in formation of these clubs. Science based reputed voluntary agencies could also be involved at local level to provide necessary support to building activities of Science Clubs and popularize them in schools amongst children and local communities. The objectives of the Science & Mathematics clubs would be to:

• Stimulate a spirit of curiosity, enquiry, innovation and creativity amongst students/children through activities which would supplement conventional (in class) education and make science and mathematics an enjoyable and interesting pursuit.

#### Innovative Pedagogy in Transforming Science Education

- Motivate children and youth to take up scientific activities and contribute towards the cherished goals of achieving a scientific society.
- To transform teachers as a facilitator and change agent (from that of educator)
- To encourage and empower students to participate in the National Children's Science Congress.

Informal out-of-school engagement with Science and Maths Teachers would typically be learner-motivated, guided by learner interests, be voluntary, contextually relevant, collaborative, nonlinear, and as often open-ended. The activities to be undertaken under the RAA, thus would have to be:

- Designed to be interactive, support and encourage learners to extend their learning over time
- Provide multiple ways for learners to engage with concepts, practices, and phenomena within a particular setting
- Promote and support participants to interpret their learning experiences in the light of relevant prior knowledge, experiences and interests
- Developed through partnerships with appropriate expert(s)/ agencies and wherever possible be rooted in scientific problems and ideas that are relevant for the local community.
- All educational tools and materials should be developed through iterative processes involving learners, educators, designers, and experts in SMT through appropriate field trials.

Promotion of Science & Mathematics Teacher Circles

- Teachers of Science and Mathematics in Schools to be grouped by Mentoring Institutions in teacher circles at decentralized levels on a voluntary basis. The Mentor Institutions would endeavour to develop teacher capacities for teaching Science and Mathematics in new and empowering ways so as to render the experience of Science & Maths teaching in an engaging manner for children.
- Mentoring Institutions would try to engage teachers as a community, with the depths and intricacies of specific subject details (Science and Mathematics) to propagate a culture of doing and creating knowledge through problem-solving, 12 programme and demonstration.
- The Monitoring Institutions would try and propagate a culture of "beyond text books" to bring live Science, Mathematics and Technology issues in to the classroom.

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• The MIs would help to provide a platform (at decentralized levels) for teachers to share experiences with each other, make & present presentations of them professional experiences – innovations, successes and failures in teaching-learning of Mathematics and Science with their peers.

The MIs would provide expert mentoring and build partnerships in these meetings. The MIs would help form & sustain Teacher Circles that can be

- Subject oriented Circles
- Project-based clubs/Circles
- Problem-solving circles
- Guided exploration circles
- Research mathematicians/Scientists
- Topic-centred clubs
- Applied math /technology clubs

Teacher Circles/ Clubs in Science and Mathematics would encourage local school-based programs, development of low cost Science and Mathematics kits for schools to use, local campaigns on natural events/phenomenon in Science, residential summer programs for teachers for up-gradation in Science and Mathematics teaching, methods, organize local Math/Science contests for students and teachers or both, teaching Workshops/Seminars/Demonstrations on fun with mathematics/science lessons, organization of local Science Exhibitions/Book fairs/Math Melas, publish media articles on Science & Mathematics, activities on Contemporary scientific events to create awareness etc.

- Provision of Good books for teachers in different languages and e-format.
- Subscription/ Membership to local, regional, State and National Teacher Science & Mathematics Associations/ Circles/ National Teachers Science Congress (NTSC).
- Participation in National Teachers Science Congress and activities of nearby Research /R&D Institutions/Mentoring Institutions.

# School Mentoring

Higher Education Institutions (HEI) will be encouraged and networked to mentor neighbourhood Higher Secondary, Secondary and Upper Primary schools over a period of 5 years. They will be called Mentoring Institutions'

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#### Innovative Pedagogy in Transforming Science Education

Bhabha Centre for Science Education (HBCSE), Indian Institutes of Technology (IITs), Indian Institute of Science Education and Research (IISERs), National Institutes of Technology (NITs), National Council of Science Museums (NCSM) and other institutions would provide the leadership and engage with mentoring of schools.

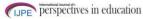
The Department of Science and Technology and National Council of Science Museums (NCSM) through its various agencies would also play a major role in mentoring and encouraging activities in schools for the promotion of Science.The students of Indian Institutes of Technology /NIT and other premier Institutions may be encouraged to mentor KVS & NVS school students to take up local problem-solving projects. For the purpose the State/UT Govt. will map schools and Higher Education Institutions and then network each other considering neighborhood, mutual convenience and subject interests etc. The role of these Mentoring Institutions would be to:

- To improve student engagements through Science and Mathematics activities in schools
- To create a culture of "making and doing" by students and teachers. To encourage collaborative engagement of teachers and students with planned and coordinated sustenance in the form of material access (resources, documentation and e-materials), institutional support (work load, scheduling, flexibility etc.) and intellectual support (content experts, mentoring, etc.).
- To ensure technology enabled scientific talks at schools.

Effective Classroom Transaction: Teaching -Learning

Endeavour is for an enabling Class room transaction with following features viz.

Sustained & Active engagement with every child	Hands on-Activity based learning	Problem Solving
Experimentation & Demonstration	Modelling	Self- Learning
Peer-to-Peer Collaborative Learning	Online resources	Culture of Beyond Text books and inquiry-based learning



Sustained & Active engagement with every Child

- Teaching -learning preferably be in the mother tongue of children /child's home language/language of school instruction related to daily life experience and socio-cultural context, especially in case of primary classes.
- Encouraging children to share their experiences, news and observations in nature in the class and use their talk as a resource in building classroom discussion richer.
- Allow children to invent their own ways of using existing vocabulary to convey science and mathematical ideas.
- Encourage children to express their scientific and mathematical findings.
- Opportunity to respond, discuss and share STM readings and books.
- Encouraging children to participate in classroom activities through asking questions and framing of problems.
- An environment that tolerates learning from failures and therefore motivates children (and teachers) to be creative, and think out-of-the-box.
- Encouragement for perseverance, by providing positive reinforcement for persevering on tasks; and by not rewarding only the fastest correct answer.
- Hands on-Activity based learning (*Todphodjod*)
- Problem Solving
- Modelling
- Experimentation & Demonstration
- Self learning
- Peer to peer collaborative learning
- Online resources (in local language) use
- Culture of Beyond Text books and inquiry-based learning.

Strengthening Teacher Support Institutions through use of Technology

The State SCERT/SIE, IASE, CTE, DIETs and Block and Cluster Resource Centres be strengthened with specific emphasis on Science and Mathematics by constituting a Resource Group at each level and build their capacity by networking them with Higher Education Institutions, Teacher Circles and Science Congress etc. The teacher educators and academic support institutions (SCERT, DIETs, BRC and CRCs) also be empowered in using ICT in science and mathematics teaching-learning and activities.

# *Innovative Pedagogy in Transforming Science Education* Development of Resource Materials

MHRD will constitute an Institutional consortium under the joint leadership of NCERT, DST and National Council of Science Museums (NCSM) to undertake the following activities viz.,

- NCERT in collaboration with DST Vigyan Prasar, National Children Science Congress and National Science Teachers Congress will systematize availability of academic resources on Science & Mathematics in the country.
- The online resources available at NCERT NROER (National Repository of Open Educational Resources) will be further improved with the collaboration of Children's Science Centre, Pune, UNESCO, Home Bhabha Centre for Science Education and other organizations working for promoting science math teacher education in the country.
- NCERT, National Book Trust, Vigyan Prasar, Bal Bhawans, National Computer Saksharta Mission, Sahitya Academy, National Council for Science & Technology Communication and other institutions be encouraged to make available their publications in e-format in the public domain.
- NCSTC, NCERT and National Book Trust to translate popular science books available in public domain in different scheduled regional languages.
- Individual authors be invited to contribute e-Books.

Use of Technology in Science and Mathematics Teaching

The Higher Secondary, Secondary and Upper Primary Schools will incrementally be supported with ICT infrastructure to support Science and Mathematics teaching/learning in order to transform the scope of classrooms to e-classrooms, rich in audio-video, demonstrations and access to internet.

# Provision of Teaching-Learning Equipment and Materials

Good scaffolding and other conceptual, physical demonstrations, mathematical and statistical visualization and digital models which fosters active engagement of children in the classrooms be encouraged. All schools be provided with a variety of science and mathematics models and science magazine for example (National Institute of Science Communication and Information Resources) for active engagement of children. In addition, School

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libraries be enriched with books for teachers and students to sustain interest in Science, Mathematics and Technology.

# Strengthening School Science and Mathematics Laboratories

School Science Laboratories will be strengthened based on set standards. The students will be given opportunity to explore and visualize science and mathematics ideas, concepts through activities and enhance their understanding of the subjects through critical thinking and problem-solving skills. All the elementary and secondary Schools will be provided Science and Mathematics Kits to augment materials for use in mathematics to understand concepts as well as to build upon understanding for applications and problem solving. Funds under centrally sponsored schemes can be accessed for the purpose. Mentoring Institutions can help & guide schools/States Govt. to build appropriates& modern school laboratories.

Recruitment of Science and Mathematics Teachers

- States and UTs must have earmarked teacher posts for Science and Mathematics from classes VI to XII and recruitments be done with teachers with Science and Mathematics background as per NCTE guidelines Regular monitoring of States/UTs for filling up of vacancies.
- States Governments & Universities to keep register of Science& Maths graduates and organize regular counselling services to attract such graduates to Teacher Professional Degrees/Diplomas such as D.Ed. & B.Ed. etc.

Assessment Design for Science and Mathematics for Students

- Development of appropriate methods for Continuous and Comprehensive Assessment learning of Science & Mathematics by teachers, where in students are assessed not for rote learning of Science and Mathematics concepts but by testing their comprehension through applications and projects, problem solving and creative use of concepts etc.
- Workshops & seminars to be held with school boards to rectify assessment systems. Mentoring Institutions Science/ Maths organizations, Department of Science & Technology and National Council of Science Museums (NCSM) to play a lead role in this task.

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# *Innovative Pedagogy in Transforming Science Education* Teacher Preparation for Science, Mathematics and Technology

# Pre-Service Teacher Education

Review of Teacher Education Programmes curriculum (viz., D.El.Ed., B.Ed. etc.) on Science, Mathematics and Technology with emphasis on problem solving, critical thinking, and reflective learning and on incorporating the use of technology in Science and Mathematics teaching-learning, pedagogy and assessment systems.

Teacher in-Service Capacity building

- Enlist best and brightest teachers in Science and Mathematics in the State/ UT as Master Teachers for developing training designs and training modules for Science and Mathematics separately for primary and upper primary, secondary and senior secondary levels. Teacher training modules to promote spirit of enquiry, discovery, project work and investigation, validation and application of concepts in day to day life of a child.
- Capacity building of Teacher Educators in SCERT, CTEs & IASEs, DIETS & Block and Cluster Resource Centres on the design, modules and conduct of In-service teacher training in Science and Mathematics.

# Mentoring System

Teacher Mentoring by Science, Math Teacher based Higher Education Institutions/ R&D Institutions/Private S&T Institutions. Basic guidelines for mentoring by Higher Education Institutions & SC/Maths organizations to include: -

- Support material (print, ICT-NROER, lab resources, space, maps), institutional (policy, network, scheduling), and intellectual (subject experts, college teachers, researchers) are provided with resource material viz. Posters, Audio-visual material, visually rich handbooks, pamphlets, videos etc. to facilitate conceptual understanding of different aspects.
- Block/Cluster level Meetings with Teacher SMT Circle members and for Peer learning. Peer discussion to include teaching processes, children learning behaviour, their interests, and their resources and

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ways in which these can be brought into the classroom for improved learning outcomes.

• Demonstration, practice and reflection opportunity for Teacher to observe, learn and space for making and doing and get opportunity for classroom and beyond classroom practice under guidance in pedagogy & methodology sensitive to the diversity of learners and learning situations.

# Academic Support

Access to Resource Persons (BRP/CRP) for guidance and feedback and innovation.

# National Teachers Science Congress (NTSC)

Encourage and support teachers to communicate and share innovative concepts/methodologies in the fora. Mentoring Institutions to help identify and nurture Science & Maths teachers towards this goal.

# Teacher's as Change Agents

Orientation of School Head Masters and Teachers to nurture student Science and Mathematics clubs/ circles as motivators (not as Educators) to create excitement and stimulation for SM&T among students/children.

# Reference

- Rojalin Samal., "Parents' attitude towards schooling and education children project", report submitted to department of humanities and social sciences for the partial fulfillment of the requirement in master's degree in development studies., National institution of Technology Rourkela - 769008 May 2012.
- B.D. Bhatia and R.N. Safaya., "Educational Psychology and Guidance", Dhanpat Rai Publishing Company (P) Ltd., Ansari Road, Darya Ganj, New Delhi – 110002., Pg. 242-252.

# An Appraisal on the Right to Education of Children in India – A Critical Analysis

#### SEDIGHEH ALIREZAEL

Research Scholar in Law, Iran

Education being the most essential need of the mankind has been reconsidered by all over the world as a fundamental right. Thus, to minimize the mistakes of ignoring the importance of education is a highly warranted task. Child education has been regarded as a very vital issue under the legal arena of the India. India is home to 19% of the world's children, more than one-third of the country's population around 440 million is under 18 years. India's children are India's future. The evolution of the education system in India towards the elementary education becomes a decisive factor in the development of the country. As far as India is concerned, 2011 was the year which had a significant nexus with the educations and its legal perspective. Needless to mention that, meticulously 100 years ago i.e. in 1911 the first Bill on education which sought to make the education to be a fundamental right was proposed on the Indian soil. The most drastic factor of making the education available for the public at large brought about a mammoth change on the horizons of the India and a magnificent upsurge has been achieved as far as education is concerned.

Key words: Right of Children, Act of 2009 and UN Convention.

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# Sedigheh Alirezael Introduction

In 2011 the notification of the Right of Children to Free and Compulsory Education Act, 2009 was implemented. Thus, by making a concrete legislation for the child education India has shown its keen commitment to this vital issue.

One of the key achievements of India's education system since Independence has been the consistent rise in the country's literacy rate, which has risen from 18% in 1951 to 74% in 2011. Significant efforts have been made to universalize elementary education during these 60 years.

Albeit the appraisal of the success or failure of this attempt will be revealed with the journey of time. India has the world's largest child population, and children comprise 42% of India's people. Hence, an overview of the child education in India becomes quintessentially important.

#### Backdrop of Child Education in India

Despite being one of the oldest civilizations of the world, education has always been remained a limited sphere of few hands. Owing to the trap of caste system and orthodox social constraints made education possible for public at large but once in a blue moon. As it remained to be available for a small section of society. However, in August 1848 the most significant step towards the education of the girls of lower caste was initiated by Mahatma Phule in Pune. That school was the first attempt towards the education of girls belonging to the disadvantaged strata of the society. Despite this attempt there was a scope for the generalization of education and to promote its widespread reach a statutory support was needed. During the British rule, in spite of compulsory education laws, not much progress was made in this direction.

# International Scenario of the Child Education

As far as international arena is concerned, a very keen and deliberate framework has been vested by the United Nations with its member states. The journey of education as an essential human right can be traced back till Universal Declaration of Human Rights which expressly approves that, Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Article 26 of the 1948 Universal Declaration of Human Rights 'Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary

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education shall be compulsory. Apart from this, European Convention on Human Rights, Protocol 1 (1952) promotes the education by providing, that no person shall be denied of the right to education. Perhaps one of the oldest provisions of the education as a matter of right can never be completed without mentioning the UNESCO Convention against Discrimination in Education, 1962. In addition to it, International Covenant on Economic, Social and Cultural Rights, adopted in 1966 and abbreviated as ICESCR did provide a conclusive provision about the education for all. Convention on the Rights of the Child: (1989): States Parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular: make primary education compulsory and available free for all

However, as far education being a fundamental right of the children has been primarily focused by the UN Convention on the Rights of Child (UNCRC), 1989 which provides that, 'the education of the child shall be directed to the development of the child's personality, talents and mental and physical abilities to their fullest potential' United Nations Convention on the Rights of the Child (CRC), in 1992 is yet another significant step of child education. Being the United Nations Literacy Decade (2003-2012), the Commission on Human Rights urged the member states:

"To give full effect to the right to education and to guarantee that this right is recognized and exercised without discrimination of any kind. In furtherance to this, five principal International Treaties influenced by UDHR and relating directly to education have played a pivotal role in the education for children, viz., a) International Covenant on Economic, Social and Cultural Rights (1966); b) Convention against Discrimination in Education (1960); c) Protocol Instituting a Conciliation and Good Offices Commission to be Responsible for Seeking the Settlement of any Disputes which may arise between States Parties to the Convention Against Discrimination in Education (1962) d) Convention on the Rights of the Child (1989); and e) Convention on Technical and Vocational Education (1989).

Indian Scenario in Furtherance to Address the International Treaty Obligations

India had marched a significant journey towards the child education. As a vital part of the adoption of various international obligations into the municipal laws, India has come up with various national level policies. Some of the significant policies include, National Policy on Education, 1968 which perspectives in education

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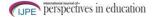
brought the most decisive impact on India's education system. In the year 1974, India adopted its National Policy for Children. The text opens with the affirmation: 'The nation's children are a supremely important asset. Their nurture and solicitude are our responsibility.' This was further emphasized in the National Policy on Education, 1986. In the review of the policy in 1990, it was recommended to include Right to Education as a fundamental right in the constitution, on the basis of which National policy on Education 1992 was formulated. Being a signatory to the UN Convention on the Rights of the Child (CRC), in 1992 India had initiated the process to bring the education into the purview of fundamental rights of the children and all next generations.

#### Constitutional appraisal of right to education in India

Being the roundworm of the Indian legal framework, the Constitution of India has been equipped with the various vital provisions for the education. An integral component of fundamental rights i.e. Part III of the Constitution of India Article 29 and 30 of the Indian constitution provide citizens the Educational and Cultural Rights. However, these provisions were having limited sphere of minorities and exclusive targeted subject matter.

The most significant step towards the education was the incorporation of education into the Directive Principles of State Policy i.e. Part IV of the Constitution of India. Article 45 of the newly framed Constitution stated that "the State shall endeavor to provide within a period of 10 years from the commencement of the Constitution, free and compulsory education to all children until they complete the age of 14 years". However, despite of lacking the enforceability this step could not achieve the desired impact. And thus, nothing much happened towards universalization of elementary education.

The continuously upgraded development pertaining to the education in India brought many fruitful results. In India, the education falls under the control of both the Union Government and the State Governments, with some responsibilities lying with the Union and the States having autonomy for others. Entry 66 of the Union Subject List provides the co-ordination and determination of standards in institutions for higher education or research and scientific and technical institutions. The Constitutional Amendment Act, 1976 included the subject 'Education' in the Concurrent List of the VII Schedule of the Constitution of India which enables the Union Government to make law on this subject.



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This being a substantive, financial and administrative step made an efficient bridge for a new sharing of responsibility between the Union Government and the States. Moreover, by virtue of various national policies and schemes the Union Government of India made the education an agenda of first priority.

Entry 25 of the Concurrent list provides that Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour and entry 26 of this list includes Legal, medical and other professions.

The Article 5I(A) (k) has added the significance of the education being a prime area of development of the nation. The fundamental duties have been annexed by the duty on the parents/guardian to provide opportunity of education to the children. This Article provides that "it shall be the duty of every citizen of India who is a parent or guardian, to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

In 2002, the amendment to the Constitution of India made education as a fundamental right. To that effect an Article 21A had been inserted into the Part III i.e. fundamental rights within the constitution of India. thus, Article 21A provides that, "the State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine."

However, it has been further qualified by adding that the manner of this right would be as determined by a follow up consequential legislation. Incorporation of the education into the segment of right to life has engraved the significance of education into the constitutional framework of India. No wonder due to which a never-ending enforceability of the right to education has been proclaimed to the citizens of India.

#### Legal scenario of child education in India

By duly recognizing the importance of the free and compulsory education for the children in India the law commission of India in its report on "Free and Compulsory Education for Children" had suggested the Indian legislatures to pave the way for this vital issue. Moreover, this follow up ultimately resulted into a full-fledged legislation i.e. 'The Right of Children to

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free and Compulsory Education Act 2009', passed by parliament in August 2009, and notified into force in April 2010.

Based on this Act, a subordinate legislation, the Model Rules, was framed by the centre to provide guidelines to states for implementing the Act. The Right of Children to Free and Compulsory Education (RTE) Act, 2009, thus represents the consequential legislation envisaged under Article 21-A, means that every child has a right to full time elementary education of satisfactory and equitable quality in a formal school which satisfies certain essential norms and standards.

The latest Act provides a justifiable legal platform which enables that all children between the ages of 6-14. The quality of this education would be reasonable one and due to its free nature, the Act has become a most healthy enactment towards the desired goals.

Overview of the Right of Children to Free and Compulsory Education (RTE) Act, 2009

This Act basically deals with the child education and the first solely dedicated enactment towards the issue of education of children in India. Thus, it essentially provides – free and compulsory education to all children of India in the 6-14 age group.

- No child shall be held back, expelled or required to pass a board examination until completion of elementary education.
- A child who completes elementary education (upto class 8th shall be awarded a certificate).
- This Act mandates education of children along their peer age group ("age-appropriate");
- It provides for "special training" to facilitate age-appropriate education
- It calls for a fixed student-teacher ratio.
- It will apply to all over India except Jammu and Kashmir.
- 25% reservation for economically disadvantaged communities in addition to class 1 in all private schools.
- Mandates improvement in quality of education and sets qualification and working norms for Teachers in all schools
- It mandates the school teachers to be eligible with adequate professional degree within 5 years or else will retrenchment from job.
- It mandates curriculum in all schools to be in consonance with Constitutional Values.

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- It provides school infrastructure to be improved in 3 years else recognition cancelled.
- It mandates participation of civil society in the management of schools; makes teachers accountable to parents and the community
- It provides that, financial burden will be shared between state and Union it government.
- It protects children from labour, marriage, exploitation, discrimination, abuse, violence and neglect.
- It Separates agency for implementation of Act (Education Department) from agency charged with monitoring the implementation of the Act (NCPCR)

Thus, by virtue of this Act, most of the accumulated constrains regarding educations have been successfully wiped out by this legislation. There are several provisions in the Act, including, for example, provisions prohibiting corporal punishment, detention and expulsion which need to be fore-fronted to ensure that we move towards a system that, as the National Policy on Education states, provides 'a warm, welcoming and encouraging approach for children to learn' (NPE, 1986/92).

One of the most important aspect, however, is to ensure that the teaching-learning process is free from stress and anxiety with obvious implications for curricular reform. School Testing and grading systems need to be reviewed to motivate children to deepen and widen their learnings. This Act also lays down the responsibilities of teachers. Teacher accountability systems would need to ensure that children are learning and that their right to learn in an environment that is free from stress and anxiety is not violated.

This UN recommendation has been reinforced in the provisions of the Right of Children to Free and Compulsory Education (RTE) Act (2009), which came into effect in India on 1 April 2010, enshrining in law for the first time the rights of all Indian children aged between six and 14 years to free and compulsory elementary education regardless of caste, class, gender, etc. The RTE Act, though deserves due credit for laying down in fairly specific terms state's responsibility towards education, it would be appropriate to examine the status and awareness on the part of schools and concern authority to provide free elementary education to the children aging between six to fourteen years of old.



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Impediments to the Implementation of Free and Compulsory Education for Children in India

Albeit by virtue of the latest Act of 2009 the government has selfimposed the responsibility of child education on its shoulders, the implementation of this noble enactment has been seen to be lacking due to certain crucial factors. Such as-

Inability to Encompass the Children out of Mainstream Social Order

The number of out of school children is a challenge before the government. With more than one-third of its population below 18 years, India has the largest young population in the world. Out of every 100 children, 19 continue to be out of school. According to UNESCO's report on progress in primary education, around 7.74 crore children around the world are out of school. Three-fourths of these out-of-school children reside in 15 countries including India, Bangladesh, Pakistan, Indonesia, China, Brazil and the African nations. With one-third of the world's illiterate, the report places India 105th among 128 nations.

#### Financial Lacking for Resources

Insufficiency of funds has made the right to education a subordinate one as compared to the other right for almost half century after the independence. However, despite of new incarnation of right to education by virtue of new Act of 2009 could not avoid the financial constraints. Albeit the government is combating the financial insufficiency by ways of funds from the institutes like World Bank etc. Since it began funding education funding in 1963, the World Bank has provided over U.S. \$30 billion in loans and credits. It currently finances 153 projects in 79 countries.

## Lack of Infrastructure

Financial scarcity further effects on the infrastructure and other essential equipment's for the education spreading and for imparting quality education to the children. Thus, the area of lack of sufficient infrastructure needs to be addressed by the government.



#### An Appraisal on the Right to Education Poverty

Being a most vicious circle, poverty has been remained to be the box of pandora for most of the policies and plans of the government. Child labour, other evil practices and the non-willingness of parents to send their children to the schools has a harsh reality of poverty. Thus, empowerment of disadvantaged sections of the society becomes a pre-requisite to implement the free and compulsory education of the children in India.

# Judicial Trend

The commitment of the government of India was further strengthened by the judicial trends especially in 1992 in the case of Mohini Jain v. State of Karnataka, the Supreme Court of India held "the right to education flows directly from the right to life as the right to life and the dignity of an individual cannot be assured unless it is accompanied by the right to education", and "the fundamental rights guaranteed under Part III of the Constitution of India, including the right to freedom of speech and expression and other rights under Article 19 cannot be appreciated and fully enjoyed unless a citizen is educated and is conscious of his individualistic dignity".

Subsequently, in the case of Unnikrishnana, J.P. v. State of Andhra Pradesh, the Supreme Court held that "though right to education is not stated expressively as a fundamental right, it is implicit in and flow from the right to life guaranteed under article 21 and must be construed in the light of the Directive Principles of the constitution." In Unni Krishnan the Court took support from UDHR3 and Article 13 of ICESCR and for the first time articulated education as a 'social right' The argument that the right to life in Article 21 is merely negative in character was rejected by the Court. The question of insufficient resources was also very ingeniously dealt with by Jeevan Reddy, J.

He states quite naturally that it is only Article 41 which speaks of economic capacity of the State, whereas Article 45 does not speak of the limits of its economic capacity as does Article 41 and therefore this hurdle does not stand as an obstacle in carving out a fundamental right to primary education from Article 21. Thus, constructing a fundamental right to education from a long-ignored directive principle as presented in Unni Krishnan as merely an example of the old idea that the directive principles furnish the technology of construction of Part III and now as a swayambhu (self-manifesting) aspect of new judicial power.

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Today, in India right to education has become a fundamental right of children of the age group of 6 to 14 years. Article 19 (1) (a) of the Constitution of India provides that all citizens have the right to freedom of speech and expression.

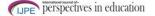
Freedom of speech and expression means the right to express one's own convictions and opinions freely by words of mouth, writing, printing, pictures or any other mode. Only the educated person can exercise the right to freedom of speech and expression in an aimed way. A Bench of Chief Justice S.H. Kapadia and Justice Swatanter Kumar also held that a child who is denied right to access education is not only deprived of his right to live with dignity, he is also deprived of his right to freedom of speech and expression enshrined in Article 19(1) (a).

Along with this the newly enacted Act of 2009 had also been challenged for this 25% reservation provision under the Section 12(1) (b) was challenged. However, on April 12, 2012, the Supreme Court upheld the constitutional validity of the provision in the Right to Education Act, 2009 that makes it mandatory for all schools (government and private) except private, unaided minority schools to reserve 25% of their seats for children belonging to "weaker section and disadvantaged group".

#### Suggestions

Through this way the discourse pertaining to the efficacy of free and compulsory education of children in India can be concluded with some of the possible suggestions. Being the most monstrous factor Corruption in education is omnipresent in India and it should be eradicate form the educations system. The Right of Children to Free and Compulsory Education Act, 2009 is a milestone enactment.

Especially for the age group of 6-14. However, the children below the age group of 6 years and above the age of 14 years have been left out from the purview of this noble enactment. Thus, an amendment to that effect should be carried out by the government. So that the children irrespective of their age would get ensured education.



#### An Appraisal on the Right to Education Conclusion

As it has been rightfully quoted that, 'education is a progressive discovery of our own ignorance. Thus, the journey of imparting education is an eternal process. It has been facilitated by a finest enactment of 2009 within India. However, with respect to children there is a scope of more deliberate provisions to be incorporated in this Act. India has 158.7 million children in the 0-6 year's age group. Hence, the pivotal role of educational institutions cannot be afforded to be ignored. Former Chief Justice of India, Justice PN Bhagwati has rightfully quoted that. The child is a soul with a being, a nature and capacities of its own, who must be helped to find them, to grow into their maturity, into a fullness of physical and vital energy and the utmost breadth, depth and height of its emotional, intellectual and spiritual being; otherwise there cannot be a healthy growth of the nation." Therefore, an appraisal pertaining to the children and their right to free and compulsory education can't suffice merely granting them the right. Albeit, by enabling them to be an efficient beneficiary and by making them worthy of education the desired goals can be achieved.

#### Reference

- Lectures From Colombo to Almora (Hardcover) isbn: 8175050810, Published January 1st 2006 by Advaita Ashrama Publication Department, Kolkata, India
- Bachpan Bachao Andolan versus Union of India (Writ Petition Civil No. 51 of 2006) Accessed At -http://www.hrln.org/hrln/child-rights/pils-a-case / 644supreme-court-sets-ground-for-significant-reforms-in-existing-child-protectionregime-bans -use-of-children-in-circus-orders-of-their-rescue-andrehabilitation.html
- Journey of Right To Education: A Historical perspective, S K Joshi, Scholarly Research journal For Interdisciplinary Studies, ISBN 2278-8808centre.
- Savethe children. se/ sites/ default/ files/ documents/2167.pdf censusindia .gov. in/ 2011 -prov- results /prov\_rep\_ tables.html
- Aradhya N. and Kashyap A., *The 'Fundamentals' of the Fundamental Right to Education in India, Books for change*, Bangalore (2006)



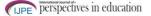
#### Sedigheh Alirezael

- Jotirao Phule, Tarkateertha Laxmanshastri Joshi Translator DAYA AGARWAL,http://www.arvindguptatoys.com/arvindgupta/phule.pdfNaliniJuneja, India's Historic Right to Free and Compulsory Education for Children Act 2009
- The Articulation of a New Vision, In Kazuyo Minamide and Fumiko Oshikawa (Eds.) CIAS Discussion Paper No.24
- Right to Education in South Asia: It's Implementation and New Approaches, The Center for Integrated Area Studies, Kyoto University (2012) censusindia.gov.in/2011prov-results/ prov\_ rep\_ tables.html
- Aradhya N. and Kashyap A., The 'Fundamentals' of the Fundamental Right to Education in India, Books for change, Bangalore (2006)

MHRD: *National Policy on Education* (New Delhi, MHRD), para 4(4) (1968) India Alliance for Child Rights Paper submitted to the UN Committee on the *Rights of the Child, on the 2007 Day of General Discussion theme MHRD: National Policy on Education* (New Delhi, MHRD), para 3.2. (1986)

Pillai Chandrasekharan, Right to Education in India.

- International Journal of Advanced Research in Management and Social Sciences ISSN: 2278-6236 Vol. INo.3, September 2012 www.garph.co.uk IJARMSS, 191.
- Right to Education in India: Challenges and Accessibility Dr. Mukesh Garg Nareshlata Singla
- Beiter, Klaus Dieter (2005). *The Protection of the Right to Education by International Law. Martinus Nijhoff Publishers.* p. 22. ISBN 9789004147041.
- Article 13 (2) (a) to (c), International Covenant on Economic, Social and Cultural Rights



# Effectiveness of Co-Operative Learning for Teaching Mathematics at Secondary Level

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> Co-operative learning is one such approach which makes the students to learn as group to maximize their own and each other's' learning. Cooperative learning strategy stands for teaching in which students are provided opportunities on co-operative principles in which they share their knowledge and experiences with their peer group. In Co-operative learning, individuals' work with his\her peers to achieve a common goal rather than individual gain. Thus, we have shown that cooperative learning is an alternative to answer the socialization, motivation and academic performance problems, and we have verified that co-operative strategies can be an efficient tool, among others, to improve the class climate.

Keywords: Learning, Mathematics, Experiences, Students and Understanding.

Introduction

Education is derived from the Latin word "Educatum" which means to draw out to foster growth and to develop. Education in its general sense is a form of learning in which knowledge, skills, and habits of a group of people are transferred from one generation to the next generation through teaching training and research or simply through any experience, that has a formative effect on the way one thinks, feels or acts. The word "Education" has a very wide connotation and it is very difficult to define it precisely. Education is

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important from various points of view. Its field of activity is so wide that all activities and experiences are embraced in its sphere of work. Education develops the social qualities of service, tolerance, co-operation, fellow-feeling inspiring the child to lay down all, even his life for the glory and prosperity of his country. Education is an effort of the senior people to transfer their knowledge to the younger members of society.

#### Co-operative Learning

Co-operative learning is an educational approach which aims to organize classroom activities into academic and social learning experiences. There is much more too co-operative learning than merely arranging students into groups, and it has been described as "structuring positive interdependence." Students' *learning* goals may be structured to promote *co-operative*, competitive, or individualistic efforts. Co-operative learning is a successful teaching strategy in which small teams, each with students of different levels of ability use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for leaning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement.

Co-operative learning is the instructional use of small groups so that students work together to maximum their own and each other learning. Cooperative learning provides the context within the cognition and meta cognition takes place. Within the cooperative leaning group, interpersonal exchange takes place, intellectual change result from conflicting ideas and conclusions; they promote critical thinking, higher level reasoning and Meta cognitive thought.

#### Need and Significance of the Study

Now a days, there is a trend to consider learning as perceived by the students and not as the teacher. Effective learning occurs only through effective and constant interaction between the learner and the teacher is psychologically engaged in. Now a day's peer collaboration is used in many classrooms. In this study the investigator tried to unreal the possibilities of co-operative learning by comparing with the conventional method.

Co-operative learning methods have been used in several schools in recent years. The use of cooperative learning methods indicates better students' achievement and the spin off in the form of the development of skills

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and attitude of working together. The use of co-operative learning method in the classroom boosts an involvement of each individual to achieve a common goal and sharing of the experience.

Usually mathematics is taught as one of the subjects in school and universities. Mathematics is considered as queen of all sciences. The present study is an investigation on the Effectiveness of co-operative learning for teaching mathematics in particular to the secondary school students. Many complex mathematical concepts can be taught easily with the help of cooperative learning. So, it is the need for the teachers in their millennium to provide quality in delivering of learning instruction to the learners. Learning which is considered as the lifelong process should be effective, meaningful and joyful to the learner.

#### Objectives of the Study

The objectives of the present study are:

- To find whether any significant difference between pre-test score of control group and experimental group.
- To find whether any difference between post test score of control group and experimental group.
- To find whether any significant difference between pre-test and post test score of control group.
- To find whether any significant difference between pre-test and post test score of experimental groups.

Hypotheses of the Study

Hypotheses of the present study are:

- There will be significant difference between pre-test score of control group and experimental group.
- There will be significant difference between post test score of control group and experimental group.
- There will be significant difference between pre-test and post test score of control group.
- There will be significant difference between pre-test and post test score of experimental groups.



# Method Used for the Present Study

Among of the various methods of research, the investigator plans to adopt experimental method on view of objective of the study.

## Population and Sample

A population is any group of individuals that have one or more characteristics in common that is of interest to the researcher. The population of the present study is the entire student doing in secondary level. The sample portion of the population selected for observation and analyses is called sample. For the investigation two divisions of VIII standard students will select from one school. A sample of 40 students will select for the study. One group is considered as control group and other as experimental group.

Tools used in the Study

The tools used in the study are:

- Lesson Presented through Co-operating Learning Method
- Achievement Test in Algebra
- Personal Data Sheet

#### Analysis of Data

H1: There will be significant difference between pre-test scores of Control group and Experimental group.

#### Table - 1

# Difference Between Pretest Scores of Control group and Experimental Group

Test	Group	Ν	Mean	S. D	t - value	p - value	Result
Pre-	Control	20	54.850	15.4316	1.059	0.846	NC
test	Experimental	20	59.850	14.4524	-1.058	0.846	N. S

The table 1 shows that the p value is greater than 0.05 at 5% level of significance.

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Hence the hypothesis is accepted. That is, there is no significant difference between pretest scores of control group and experimental group. H2: There will be significant difference between post test scores of Control group and Experimental group.

# Table - 2 Difference Between Post Test Scores of Control group and Experimental Group

The table 2 shows that the p value is greater than 0.05 at 5% level of

Post Control 20 66.900 15.2139	Test	Group	Ν	Mean	S. D	t - value	p - value	Result
-3.263 0.772	Post	Control	20	66.900	15.2139	-3.263	0.772	N. S
test Experimental 20 81.400 12.7873	test	Experimental	20	81.400	12.7873	5.405		

significance.

Hence the hypothesis is accepted. That is, there is no significant difference between post test scores of control group and experimental group.

H 3: There will be significant difference between pre-test and post test scores of control group.

#### Table - 3

Difference Between Pre-test and Post test Scores of Control Group

Group	Test	Ν	Mean	S. D	t - value	p - value	Result
Control	Pre-test	20	54.850	15.4316	0.075	0.000	c
	Post test	20	66.900	15.2139	-8.975	0.000	S

The table 4.3 shows that the p value is less than 0.05 at 5% level of significance. Hence the hypothesis is accepted. That is, there is a significant difference between pre-test and post test scores of control group.

H 4: There will be significant difference between pre-test and post test scores of experimental groups.

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### Table - 4

Difference Between Pre-test and Post test Scores of Control Group The table 4 shows that the p value is less than 0.05 at 5% level of significance.

Group	Test	Ν	Mean	S. D	t - value	p - value	Result
Experimental	Pre-test	20	54.850	14.4524	-15.189	0.000	S
	Post test		66.900	12.7873			

Hence the hypothesis is accepted. That is, there is a significant difference between pre-test and post test scores of experimental groups.

Findings of the Study

- No significant difference found between pre-test score of control group and experimental group.
- No significant difference found between post test score of control group and experimental group.
- Significant difference found between pre-test and post test score of control group.
- Significant difference found between pre-test and post test score of experimental groups.

# Interpretation

From the results derived from the testing of hypothesis, it is observed that the control and experimental group differ significantly in the post test scores. The experimental group students are found to be superior to control group students with regard to posttest achievement score. This may be due to the fact that the students of VIII standard may gain more information or knowledge during the experimental teaching of algebra.

Co-operative learning of teaching improves the creativity of bright students and the dull students can also understand the content easily. In traditional method students may omit some concepts, unknowingly, but through Co-operative learning method increase the interest of students. It saves the time for learning. During examinations, students can learn the concept on

#### Effectiveness of Co-Operative Learning

seeing the picture itself. This study further revealed that there is significant difference between pretest and post test scores of control group.

The post test scores of control group is greater than the pretest scores of control group. This may be due to the effectiveness of teaching method used by the teacher who handles the subject to the control group. Hence, they are found to be superior in this regard.

In the experimental group, there is significant difference between pretest and post test scores of students of standard VIII. The post test scores of experimental group students are greater than the pretest scores of experimental group students. The reason behind this may be the method of teaching (direct experience) may provide various information about the algebra. Through direct experience, the students are able to understand the concept meaningfully.

# **Educational Implications**

Co-operative learning has several strategies and techniques for promoting an educational experience that facilitates students and teachers to move beyond standard classroom parameters. In co-operative learning, teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of the subject through a constructivist approach. In recent research studies, researchers used many of the cooperative learning strategies alone or with the cooperation of other methods, techniques and technologies to prove their points.

The investigator of the present study would like to recommend the following educational implications.

- The Co-operative Learning method of teaching should be introduced in the schools for the development of mathematical attitude and interest in pupils.
- Faculty improvement programmes viz., orientation courses refresher courses, seminar and workshop should be organized for teachers to familiarize them with various instructional strategy such as Cooperative Learning.
- Model lesson transcripts based on the Co-operative Learning of teaching on selected units may be developed by an expert's team and made available to the teachers.

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- The present study proves the effectiveness of direct experience for teaching algebra to the students of standard VIII. Considering the meritorious aspects of such teaching method, the teacher handling difficult subjects may use this method of teaching for the better understanding of the subject matter among the students.
- The teacher should adopt novel methods of teaching. Such introduction of novel practices in teaching promotes interest and involvement in the subject among the students. It also motivates the students to learn the subject matter with spirit and enthusiasm, which in turn, the scholastic achievement of students may also be increased.
- The experiment done in the present study cannot be implemented in the classes where the student's strength is more in number. Such classes may be divided into two or three sub-sections and they can be given this experiment with the help of fellow teachers.
- The government and educational authorities should encourage the teachers who undertake or introduce such novel experiment in the traditional method of classroom teaching.
- The direct experience of field trip should be introduced not only for the Mathematics students but also for the subject groups. While making field trips, the students should be properly guided by the teacher or the expert in the concerned field and the students should take necessary notes. After the field trip or direct experience, the teachers should provide additional time for clarifying their doubts.
- Proper guidelines should be provided in the method field study, evaluation and grading.

# Conclusion

In this study it is found that co-operative learning in teaching mathematics is more effective than the traditional method. The traditional method is effective in some dimensions. But co-operative learning is more effective than the traditional method in classroom teaching learning process. The co-operative learning approach is more effective than the traditional method. So, Co-operative learning approach is a powerful tool in the classroom situation.



*Effectiveness of Co-Operative Learning* Reference

- Aggarwal J.C., (1967). "Theory and Principle of Education". Vikas Publishing House Private Limited: New Delhi.
- Pallavi Kaul (2010). "The Effect of Learning together Techniques of Cooperative Learning method on student's achievement in Mathematics", *Edutracks.*, 9(12).
- Pushpanjali. B.S and Satyaprakash C.V (2010). "Effect of Co-operative learning on Achievement motivation and Anxiety", *Edutracks*.9(10).



# Parental Involvement in Education

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> The 21<sup>st</sup> centuries' growth in various sectors has led our country towards achieving the distinction of one of the growing nations in the world. Various efforts have been made by the Government as well as Non-Government Organizations but the literacy rate is increased if we compare it with the few decades back, but the cent percent literacy, quality and skill-based education is not reach to the global requirements. This may cause by the various factors. Among these factors, socio-economic statuses, parental attitude, their interest to give education to their children, their awareness regarding education and so on play a vital role. While parents of the disadvantaged children are not highly in favor of schooling and education of their children, today's scenario might have improved with widespread awareness regarding value of education. In this context, it is imperative to evaluate the parental involvement in education.

Keywords: Parental Education, School, Attitudes and Parents.

Introduction

Parents' positive attitude towards child's education is important in determining school attendance and academic achievement of the child. Education means bringing all-round development of the child this will take place not only in the schools but also at home. In this case parents also play key role in education. Under the circumstance children hardly get the attention

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a right type of handling that they need, at school. How many of us realize that a child in any of the school spends less than 200 days out of 365 in the year at school and remains there on an average of anythingfrom 4 to 6 hours a day. The rest of hours and day he is under the influence of the parents and in the home.

How great therefore is the parent's responsibility for the education of the child; if the child is ignored or neglected at school, should he be ignored or neglected in the home. Paul witty the famous American psychologist and educator who has done pioneer work on children says that much of the responsibility of helping children lies with the parents. Every child is an individual and must be handled differently. No one can understand him better than his parents; no one can help him as they can.

#### Right to Education 2010

In April 2010, universal, free and compulsory education, was stated as the 8th Fundamental Right and according to it, throughout the country children under the age group of 6 to 14 would receive free and compulsory education. India is considered as the 135th country imparting free and compulsory education within the age group of six to fourteen years.

#### Education in India: Post Independence period

During the time of Independence, India's education system was characterized by regional, gender, caste and structural imbalances. Only 14 per cent of the population was literate and only one out of three children were enrolled in primary schools (Government of India, Ministry of I & B, (1996), India 1995, P.79).

#### The Constitution of India and Education

The constitution of India was framed in 1950 with an objective to guarantee social, political and economic justice to all irrespective of caste, creed and religion. It was well visualized that, development in education along with other allied sectors would play a vital role in bringing about desirable changes in the country. It was planned that the backward sections of the Indian population i.e. Scheduled Castes and Scheduled Tribes and other backward

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classes must be provided opportunity in education to develop critical thinking and self-determination and contribute to the progress of the country.

These promises laid the foundation for the attempt of Universalization of Primary Education in India. In 1950, target was set to universalize primary education among the entire eligible category of children within the age group of 6-14 years of age within span of 10 years. During that period a great deal of expansion in education facilities was achieved. However, universalization was still a distant dream.

#### Significance of the Study

Achieving the distinction of one of the growing nations in the world. Various efforts have been made by the Government as well as Non-Government Organizations but the literacy rate is increased if we compare it with the few decades back, but the cent percent literacy is not achieved till today. The literacy rate of the disadvantaged community is still poor.

In Andhra Pradesh, in spite of the various constitutional safeguards and all the different schemes by the state government, literacy level of the rural and disadvantaged mass is found to be much lower than that of the rest of the society. This may cause by the various factors. Among these factors, socioeconomic statuses, parental attitude, their interest to give education to their children, their awareness regarding education and so on play a vital role.

While parents of the disadvantaged children are not highly in favor of schooling and education of their children, today's scenario might have improved with widespread awareness regarding value of education. In this context, it is imperative to evaluate the perceptions and attitude of these parents.

The parents, today, exhibit a positive and favorable attitude towards their children's education as a result of increasing awareness of values of education through Government endeavors and initiatives.

#### Objectives

1. To examine the attitudes of parents towards schooling and education of their children.

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- 2. To compare the parents belonging to first generation and second generation and so on communities with regard to their attitude towards children's schooling and education.
- 3. To examine whether there exists a significant gender difference in attitudes of parents towards children's education.
- 4. To examine the future planning and aspirations of the parents with regard to their child's education.

# Key Definitions

# Conceptual Framework Attitude and Behaviour

An attitude is "a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols" (Hogg & Vaughan 2005, p. 150). Attitude is the feeling or mental disposition of an individual which influences the human behaviour. Attitude is a vital ingredient for the success or failure of children in their optimum development. Attitudes structure can be described in terms of three components.

- Affective component: this involves a person's feelings / emotions about the attitude object. For example: "I am scared of spiders".
- Behavioral (or conative) component: the way the attitude we have influences how we act or behave. For example: "I will avoid spiders and scream if I see one".
- Cognitive component: this involves a person's belief / knowledge about an attitude object. For example: "I believe spiders are dangerous".

# Schooling

- Online dictionary-The process of teaching or being taught in school.
- The process of being formally educated at a school.
- Education obtained through experience or exposure.
- Merriam-Webster: training, guidance or discipline derived from experience.

# Education

• The modification of the attitude and behaviour through training in formal learning systems.

#### Parental Attitude and Involvement in children's Education

Family involvement is the strongest predictor of child educational outcomes. This dimension associated significantly with children's motivation to learn, attention, task persistence, receptive vocabulary skills, and low conduct problems. Family involvement in education has been identified as a beneficial factor in young children's learning (National Research Council [NRC], 2001; U.S. Department of Education, 2000).

Higher levels of parent involvement in their children's educational experiences at home (e.g., supervision and monitoring, daily conversations about school) have been associated with children's higher achievement scores in reading and writing, as well as higher report card grades (Epstein, 1991; Griffith, 1996; Sui-Chu &Willms, 1996; Keith et al., 1998).

It was hypothesized that home-based involvement would be most strongly associated with positive classroom learning outcomes and that direct school-based involvement would predict lower levels of conduct problems. Home-Based Involvement activities, such as reading to a child at home, providing a place for educational activities, and asking a child about school, evidenced the strongest relationships to later preschool classroom competencies. These activities were related to children's approaches to learning, especially motivation and attention/persistence, and were found to relate positively to receptive vocabulary. (Parker et al., 1997

The attitude of the parents signifies that the supporting nature of family in their children's education. The parental attitude can be negative or positive. The negative attitude of the parents regarding education and schooling can prevent their children from getting education. With less parental support in school work, low level of motivation and poor self-esteem of children can result Positive attitude of the parents can be beneficial to their children in many cases and can be reflected in improvement in class performance, creating interest among children to learn, and higher achievement scores in reading and writing.

Bogunovic Blanka and Polovina Nada (2007) found in a study that the family stimulation is the resultant of the influence of cultural and educational profile of the family and active parental attitudes regarding education and attainment of their children. The results indicated a trend of interrelatedness of cognitively and educationally favorable conditions within the family and

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positive attitudes towards school, attainment, high aspirations and cognitive and intellectual interests for out-of-school activities.

### Review of Studies on Parental Involvement in Education

Research illustrating the importance of parent involvement for the school success of adolescents spans nearly two decades. Duncan (1969), for example, compared the attendance, achievement, and drop-out rate of two junior high classes. In one class, students' parents had individual meetings with counsellors before their children entered junior high school. In the other class, students' parents did not meet with counsellors. After three years, students whose parents had met individually with the school counsellors had significantly higher attendance, better grade point averages, and lower drop-out rates.

Review of Studies on Socio-economic Status and Education

Huisman, Rani, and Smits, (2010) studied the role of socio-economic and cultural factors, and of characteristics of the educational infrastructure on primary school enrolment, the sample constituted 70,000 children living in 439 districts of 26 states of India. The results indicated that most of the variation in educational enrolment (around 70%) is explained by factors at the household level, of which socio-economic factors are most important.

And the result also indicated that, in the cities schooling decisions are hardly influenced by supply-side factors. In rural areas, however, these factors do play an important role. If there are fewer schools or teachers, or if the local culture is more patriarchal, rural children (in particular girls) participate substantially less. The major finding of this respect was that in rural areas inequalities between socio-economic status groups are lower if more schools and teachers are available.

It has been found that three major determinants of educational enrolment: socio-economic status, educational infrastructure, and culture have an impact on primary school participation in India (Evangelista de Carvalho Filho, (2008); Mingat, (2007); Shavit and Blossfeld, (1993); Jencks, (1972); Coleman et al., (1966). Socio-economic indices like the characteristics of households, parental income, wealth, education and occupation, have long been known to be major determinants of educational enrolment and achievement in both developing and developed countries.

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Huisman and Smits, (2009); Ersado, 2005; Buchmann & Brakewood, (2000); Colclough, Rose & Tembon, 2000; Shavit & Blossfeld 1993). Parents who have reached a certain educational level might want their children to achieve at least that level. For educational enrolment of girls, education of the mother might be especially important. Mothers who have succeeded in completing a certain level of education have experienced its value and know that it is within the reach of girls to complete that level. Therefore, we expect them to use the power and insights derived from their higher education to make sure that their daughters are educated too.

In a study, that examined parent involvement among minority families in Catholic high schools, Bauch (1991) socioeconomic status was significantly related to how often African American parents communicated with teachers about school programs and their adolescents' progress.

Useem (1992) also found that educational background affected families' involvement in their young adolescents' placement in the mathematics tracking system. According to Useem, "the involvement of highly educated parents in their children's placement at critical decision points in the tracking system is one mechanism by which educational advantage is transmitted from one generation to the next." These findings of the influence of socioeconomic status on parent involvement in school activities is lower among low-income and minority families than other families due to feelings of alienation (Calabrese, 1990; Winters, 1993), distrust (Lightfoot, 1978), or a devaluation of their cultural resources (Lareau, 1989).

From the above discussion, it is evident that the parents' positive attitude towards child's education is important in determining school attendance and academic achievement of the child. Favourable attitude towards schooling and education enhances parental involvement in present and future studies.

#### Conclusions and Suggestions

Democratic tendencies have made it possible to provide equal opportunities to all children to receive an education.

The only situation is the parents must be realizing that their child needs special help and guidance. Parents who have problems in handling a child and would like to do their best for him should seek the help of a child psychologist or a guidance counselor. One of the most ways in which a child learns is

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through observation of his parents, children imitate their parents. Every parent of a child should remember that he seeks the understanding and sympathy of his parents in his search for further leaning.

Even if the parents are not highly educated and have not good schooling, they can give him the encouragement and affectation and provide him with a favourable atmosphere at home, so that he may be assisted in his intellectual growth and development. Answering the child's questions should provide him knowledge as well as excitement. Parents should prepare themselves to answer the child's questions readily and correctly.

One of the most important ways in which child learns is through observation of his parents' children imitates their parents. Good manners, correct speech habits, courtesy, neatness, consideration for others, honesty, punctuality all these are qualities that can acquired by a child at a very early age, by observing his parents practice them.

A child loves the company of his parents. He loves being taken out on a trip or excursion or just simply a walk or drive where perhaps he can have his father or his mother all to himself, to hear him relate the events of the day, or to answer his questions. The child is very pleased if the father shows his office, his factory or somewhere where he works, or some other interesting place.

Some parents try to impose certain types of skills and training upon child, without realizing that he has on interest or ability in that particular direction. If a child is bright intellectually, it does not mean that must be very good at painting or music or cricket and must be trained in one of these, because his father was a good painter, or a musician, or showed excellent performance in cricket. In this way a parent may try to fulfill his own unfulfilled ambitions through his child.

Parents who have problems in handling a bright child, and would like to do their best for him should seek the help of a child psychologist or a guidance counselor when they are not very.

- The school management/HM has to conduct the parent meetings regularly, not only to discuss about the standards of the child but also to discuss about their behavior at home.
- Parents, educators, businessmen and other personalities to inculcate the school activities meaningfully.
- HMs/administrative persons send the students' performance to the parents and to get the feedback.

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- Teachers can give the guideline to the parents so that parents can mould for how students effectively participate in school environment.
- Schools committees have to be strengthened in order to mobilize the activities taking place in the school.
- ➢ If the school has a public relation officer who brings good relation with the parents.
- > Parents interact the teachers in pre and pro school timings.
- Parents have to concentrate on the standards of the children not specifically on the marks.
- Parents must provide suitable platform/exposure that makes the child to study.
- > Parents to avoid the pre occupations things to the good learning.
- Parents to avoid the high sibling nature (gender discriminations) in the homes.
- > Parents should not impose their interests on the students.
- > Parents should not compare with other students.
- Educational experts research has to be conducted on the parents to change their attitudes.
- Parents and teachers have to provide the proper guidelines to usage of technology.
- > Parents must be cautious about the advanced technology.
- Parents give directions to the child according to their interest to get bright future.

# Reference

- RojalinSamal., "Parents' attitude towards schooling and education children project", report submitted to department of humanities and social sciences for the partial fulfillment of the requirement in master's degree in development studies., National institution of Technology Rourkela - 769008 May 2012.
- B.D. Bhatia and R.N. Safaya., "Educational Psychology and Guidance", Dhanpat Rai Publishing Company (P) Ltd., Ansari Road, Darya Ganj, New Delhi – 110002., Pg. 242-252.

# Teaching Through Media and Technology

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> Teaching includes all the activities of providing education to others. Teaching is an art and science. It is a process of imparting knowledge and skills. To teach is to touch a life forever. A teacher takes a hand, opens a mind, and touches a heart. Teaching through media provides a useful platform for teaching. Media can be a component of active learning strategies, media could be a film clip, a song you hear on the radio, podcast of a lecture or newspaper. Teaching with technology can deepen student learning by supporting instructional objectives. In the classroom, technology can encompass all kinds of tools from low-tech pencil, paper, and chalkboard, to the use of presentation software, or high-tech tablets, online collaboration and conferencing tools. Online collaboration tools, such as those in Google Apps, Presentation software, Course management tools such as Canvas, Lecture-capture tools, such as Panopto etc. are few examples of technology used in the class room.

Key words: Google Apps, Presentation software, Canvas and Panopto.

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# Mercy and Thangarajathi Introduction

The person who provides education is called teacher. The teacher uses different method for giving best knowledge to his student's. He tries his best to make understand students. Teaching means interaction of teacher and students, they participate for their mutual benefits.

Many great teachers of world define teaching in different way and we can say that teaching is just to train the students so that they can stand on their own foot in society. Abbatt and McMahon say: 'Teaching is helping other people to learn and has four main functions.

The teacher has to decide what students should learn, the teacher has to help the learners to learn, the teacher has to make sure that the students have learnt, and the teacher has to look after the welfare of her/ his students. As we list out in order of importance the three most important abilities that teacher impart to students are cultivate thinking skills, stimulate interest in the subject, and motivate students to learn.

Of course, credentials, knowledge, critical thinking, and all other faculties of intelligence are important. However, a great teacher should be much more than credentials, experience and intelligence. She/he should be kind, compassionate empathetic, positive, a builder, bridges gaps and builds relationships, friendships with community.

You inspire and uncover hidden treasures, possibilities, talents and magic right before everyone's eyes. In the era of knowledge explosion, the two important tools that a teacher can make use in the class room activities are teaching through media and technology. According to Kothari commission (1964-66) "the destiny of India is being shaped in the four walls of her class room". The ICT integrated teaching learning can bring tremendous changes in the field of education.

# Teaching through media

Media can be a component of active learning strategies in a group discussions or case studies. Media could be a film clip, a song you hear on the radio, podcast of a lecture or newspaper article. Students can also create their own media. For example, student video projects can be a powerful learning experience. Effective instruction builds bridges between students' knowledge

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and the learning objectives of the course. Using media engages students, aids student retention of knowledge, motivates interest in the subject matter, and illustrates the relevance of many concepts. Media – like all other teaching techniques – should be used judiciously in the learning process.

The dramatic growth of social media creates new opportunities for engaging students. These include social networking sites such as Facebook, My Space, LinkedIn, and Twitter along with blogs and wikis. The term media was first used to describe newspapers more than two centuries ago. Today media has many different connotations. For instance, there are mass media, print media, visual media and social media. While media can take on many different forms, the purpose of all media is universally the same – media is a channel of communication.

Media can be used in direct instruction, active learning teaching strategies and student projects. Existing media resources can be used within lectures to stimulate interest in and develop knowledge of the material being taught. Given the tremendous rate of technological change, instructors face an ongoing challenge in choosing the most effective media platform to reach their students. Instructors can also create their own media to effectively and efficiently convey knowledge.

Existing media resources can also be used to engage students and facilitate active learning strategies which promote deeper learning. Media provides a useful platform for teaching, cooperative learning and problem solving and for giving more interactive mode of demonstrations. Studentcreated media involves a high degree of engagement, promotes individual learning, social interaction and immersion, and is highly customizable and collaborative (Yowell and Rhoten, 2009). Student-created media provide an alternative or a complement to traditional method, by doing a digital storytelling, project, personal reflection and communication by students, teaching can be promoted.

Media can be used in almost any discipline to enhance learning, both in class, and also for out-of-class assignments. Short film and television clips, written articles, and blog postings can be viewed to reinforce concepts and spark discussion. Research suggests that people learn abstract, new, and novel concepts more easily when they are presented in both verbal and visual form (Salomon, 1979). Other empirical research shows that visual media make concepts more accessible to a person than text media and help with later recall (Cowen, 1984).

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In Willingham's (2009) research he point out that students remember everything that's on television and forget the lectures - because visual media helps students retain concepts and ideas. Bransford, Browning and Cocking (1999) also note the crucial role that media plays for creating learning environment. Media, such as movies, documentaries, television shows and music brings interactive learning like visualizations and student-enriched activities.

#### Advantages of Using Media

Many media sources (feature films, music videos, visualizations, news stories) have very high production quality capable of showcasing complex ideas in a short period of time. Media offers both cognitive and affective experiences. It can provoke discussion, an assessment of one's values, and an assessment of self if the scenes have strong emotional content. The uses of media sources help connect learners with events that are culturally relevant. News, stories can be used to connect theories taught in the classroom with real world events and policies. Popular media (films, music, YouTube) are a familiar medium to students that helps gain attention and maintain student interest in the theories and concepts under discussion. Students can hone their analytical skills by analyzing media using the theories and concepts they are studying. The use of media in the classroom enables students to see concepts and new examples. Students can experience worlds beyond their own, especially if the media is sharply different from their local environment.

# How to introduce Media

Before learning the concept. Showing media before the discussion gives students an image to which they can compare the topics under discussion. This approach allows quick reference to easily recalled examples. Schwartz and Bransford (1998) show that demonstrations focused on contrasting cases help students achieve expert-like differentiation. In addition, Schwartz and Martin (2004) found that carefully-prepared demonstrations "help students generate the types of knowledge that are likely to help them learn" from subsequent lectures. After a brief introduction but before learning the concept.

This method provides students with a brief capsule of what the media is about and what to look for - helping to focus attention while watching the media. After learning the concept. Showing media after describing a theory or

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concept allows the instructor to use the scenes as a particular study. This approach helps students develop their analytical skills in applying what they are learning. Before and after. Repeating the media is especially helpful when trying to develop student understanding of complex topics.

#### Tips to use media

Start small- Find one movie, song, or news source and incorporate it into your class. Provide a clear link between what you want your students to learn and the media. Care must be taken provide the proper learning context. It takes time to integrate media effectively into a course. Use the subtitles feature for visual media. This is especially useful in focusing student attention on the words being said. Be prepared- Technology does not work hundred per cent of the time so have a backup plan. If the media equipment does not work, go to plan next and continue on with your class without missing a beat. Evaluate student understanding-you ask them to write a reaction in paper, take a quiz, or place questions on your exams that relate to the media content they will pay more attention and learn more in the process. Stay legal- View the copyright information on the cautions page. In addition to numerous advantages, there are also a number of cautions that faculty should keep in mind in utilizing media.

Using media requires a complete understanding of copyright law, an appreciation of the workload involved, and some skill in recognizing content that will enhance learning, instead of becoming a distraction. The instructor takes on the role of a facilitator who helps students interpret what they are listening to, reading or seeing. Media can also be pupil created. This approach help the student to step into the role of the teacher and create content that will engage learners and help them to master concepts.

#### Teaching with technology

Teaching with technology can deepen student learning by supporting instructional objectives. In the classroom, technology can encompass all kinds of tools from low-tech pencil, paper, and chalkboard, to the use of presentation software, or high-tech tablets, online collaboration and conferencing tools, and more. The newest technologies allow us to try things in physical and virtual classrooms that were not possible before. What you use depends fundamentally on what you are trying to accomplish.

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Few examples of Technology: Online collaboration tools, such as those in Google Apps, allows students and instructors to share documents online, edit them in real time and project them on a screen. Tablets can be linked to computers, projectors and the cloud so that students and instructors can communicate through text, drawings and diagrams.

Course management tools such as Canvas allow instructors to organize all the resources students need for a class (e.g. syllabi, assignments, readings, online quizzes), provide valuable grading tools, and create spaces for discussion, document sharing, and video and audio commentary. Clickers and smartphones are a quick and easy way to survey students during class. This is great for instant polling, which can quickly assess students' understanding and help instructors adjust pace and content.

Lecture-capture tools, such as Panopto, allow instructors to record lectures directly from their computer, without elaborate or additional classroom equipment, as educators we strive for students to engage with our subject beyond a superficial level. There are many ways in which technology can be used in the classroom to engage students and facilitate exciting, engaging and interesting lessons. Allowing the use of technology in the classroom has freed from the lesson-plan shackles. However, allowing the freedom to search and discover the subject through technology has fostered a love for the subject. Filming a peer assessment or recording a group discussion and uploading to Audio Book is yet another way of engaging students.

# Use Technology as a Topic for a Writing Assignment

# Create a class webpage

Class webpage can be anything from a basic site where you post announcements (think "online bulletin board") to a much more elaborate one that includes class photos, a class blog, downloadable materials, and your own domain name. Enjoy Webs.com (http://www.webs.com/), which offers both free and premium service packages.

# *Teaching Through Media and Technology* Use an online grading system

Sites likeMyGradebook.com (http:// www. my grade book.com) offer the opportunity to track grades, record attendance and seating charts, and compile reports on student progress, do an email exchange: Have your students exchange emails with students in another school, city, state, or country – especially valuable if both sets of students are studying the same material. Give multimedia presentations: Given up a traditional lecture by using a PowerPoint presentation that incorporates photographs, diagrams, sound effects, music, or video clips.

Have your students work together to create a wiki on a topic they are studying. They will need to correct each other's work and collaborate in order to make it a success. Create a Podcast. There are thousands of podcasts available on the Web. Search for ones that meet your students' needs Have students create their own podcasts to document their progress through the year or discuss their ideas on a variety of issues pertaining to the course. According to your skill level, integrating technology in the classroom offers the chance to increase student interest and teach valuable professional skills – and have some fun.

# Conclusion

Teaching with media and technology enhances the transfer of learning. Media can be used in direct instruction, active learning teaching strategies and student projects. Existing media resources can be used within lectures to stimulate interest in and develop knowledge of the material being taught.

The phrase "teaching with technology" may conjure up a variety of different images depending on our own experiences as instructors, students, or even conference attendees. It might be using PowerPoint, podcasting lectures, web designing, Web-based interactive learning modules and simulations to teach skills and concepts. The tool itself is a starting point to make the teaching more likely to be effective and appropriate. If it is integrated into a careful planning process that make magic in teaching and learning.



# Mercy and Thangarajathi Reference

- Stones E. London: Methuen; 1966. An introduction to educational psychology; pp. 50-1.
- Harris D, Bell C. London: Kogan Page; 1986. Evaluating and assessing for learning; pp. 118-26.
- Pedler M. '*Learning in management education*' Journal of European Training. 1974; 3(3):182–95.
- Handy C.B. Harmondsworth: Penguin; 1976. Understanding organizations; pp. 31-47.
- Lewin, T. (May 2, 2012). "Harvard and M.I.T. Team Up to Offer Free Online Courses". New York Times. p. Al8. Retrieved November 26, 2012.
- Courts, B., & Tucker, J. (2012). Using Technology to Create a Dynamic Classroom Experience. Journal of College Teaching & Learning (TLC), 9(2), 121-128.
- Murray, Kristine; Rhonda Waller (May-June 2007). "Social Networking Goes Abroad" (PDF). Education Abroad. 16 (3): 56-59.
- Beagle, Martha; Don Hudges. "Social Networking in Education".
- Pilgrim, Jodi; Christie Bledsoe (September 1, 2011). "Learning Through Facebook: A Potential Tool for Educators". Delta Kappa Gamma.
- McCarroll, Niall; Kevin Curran (January-March 2013). "Social Networking in Education" (PDF). International Journal of Innovation in the Digital Economy. 4 (1): 15. doi:10.4018/jide.2013010101.
- Shiao, Dennis. "Why Virtual Classrooms Are Excellent Learning Venues". INXPO. Retrieved 18 May 2013.
- Carpenter S. Definition: Whiteboard. TechTarget.
- "Screen casting | *Teaching and Learning Innovation Park*". Ipark.hud.ac.uk. Retrieved 2013-10-22.

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# Well Begun: Icebreakers as an Effective Tool for English Language Teaching

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Improvising teaching -learning strategies seems equally interesting and challenging for the educationalists since ages. Teaching and learning English are still a herculean task for the average Indian. Every effective facilitator is on the lookout for fresh methods to make their teaching deliverance effective. Novel methods are on the move to make ELT classrooms pretty interesting. Any novel method for teaching demands a convenient atmosphere for successful transmission. Creating a readyto- receive motivated group is a great hurdle in ordinary classrooms. Motivating a heterogeneous group is not an easy go. When one in the class is naughty, another one may be a villain, a third one may be an attention seeker, a fourth one may be silent and passive - why a student does what he does? What can bring him back to the channel? This problem of 'why' focuses the need of motivation. To steer a group under a common roof, to get set for the session, an attention seeking device should be employed. As the proverb expresses, well begun is half done. Launching an idea by spreading an impressive aura creates a better receptive group to work with. To create an invigorating target group, we need to have a well loaded starter. Icebreakers are potent arms to reach that end. How did the elephant get its trunk? (Let's have wild guesses!)Six sick hicks nick six slick bricks with picks and sticks. (Let's try a Tonque twister.)

Keywords: Icebreakers, English, Teaching, Learning and Educationalists.

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# Amy Introduction

Find the energy these icebreakers bring into the classroom! Ice breakers play a significant role in the English language teaching -learning process in which communication and student comfort level are important factors. They help you ensure that all students are equal participants. Teachers can use icebreakers within their classrooms to create a connected and comfortable learning environment for their students. Icebreakers are powerful aids for a successful classroom. An icebreaker allows the group to become emotionally connected with the venue and increases motivation. Icebreaker activities are the best way to help individuals to feel comfortable and ready to work, spurring an intrinsic motivation. More than an activity or a game, icebreakers proves to bring in huge impact on productivity and help to boost morale.

# Let's see what an Icebreaker is?

An ice breaker is an activity, game, or event that is used to welcome and warm up a group. When the class demands an aura that requires students to comfortably interact with each other, teacher can apply an icebreaker that best suits the situation. An effective ice breaker will warm up the conversation in your class, reinforce the topic of the session, and ensure that participants enjoy their interaction and the session. When participants don't know each other, the ice breaker will help them introduce themselves to the other participants.

Why we use Icebreakers?

- Individuals learn better when they are involved physically, mentally and emotionally. Icebreaker activities provide this kind of active, practical learning.
- Icebreakers offer a jovial platform to share their knowledge and learn from each other.
- Individuals learn differently. Some learn best by hearing, some by seeing, some by reflecting, some by interacting, and some by doing, some by talking, some by incorporating music or rhythm, and some by solving problems. Icebreakers offer an opportunity to help individuals with diverse learning styles to look as a group on a topic or issue.

### Well Begun: Icebreakers as an Effective Tool

• The facilitator can use an icebreaker as a quick assessment of the group to gauge how much they know about the topic, how comfortable they are in groups, what is their background, expertise and so on.

# Purpose for an Icebreaker

In essence, an ice-breaker prepares the group for its purpose. Without this necessary grounding, the group is less likely to be as 'successful' as it could. So, this brings us back to what makes an ice-breaker an ice-breaker. Simply putting an activity or game at the start of a session does not constitute it as an ice-breaker. To truly qualify as an ice-breaker, an activity or any experience must reflect most, but hopefully all, of the following five criteria:

- It must be fun.
- It must be non-threatening.
- It must be highly interactive.
- It must be simple & easy to understand and it must be successoriented.

Icebreakers serve a particular purpose. In their ideal form, they start getting people engaged with each other and the topic of the session. Too often, the focus is just to get people talking instead of being mindful about how the activity relates to why a person is attending it. Many do not enjoy pointless activities. So, they need to have a reason beyond sheer enjoyment to appeal to a wide range of people.

Icebreakers need to be designed so everyone can be thriving. Icebreakers should help people get comfortable, not to embarrass them. Overall, the aura should energize the group to feel engaged and ready to embrace the actual content at the end of the icebreaker.

- Successful icebreaker needs step-by-step instructions and then needs to be demonstrated (Instant Icebreakers).
- Icebreakers are most effective when they are thought out, practiced, and have clear instructions ("Beat the summer heat," 1998).

Not all students will like or want to participate in icebreakers, but it is important to keep in mind that most people do like them and not to be discouraged. Teachers need to read their class; if something is not working the

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teacher can adjust or try a different approach to an icebreaker. A facilitator should make sure the room is silent before speaking so that they have full attention of the group. A teacher can use a noisemaker like a drum or a whistle to get the student's attention.

One of the hurdles of an icebreaker is timing. It should not be too long otherwise the serious part will not be given enough time. It should not be so short that participants feel it was a perfunctory exercise. Timing also depends on the size of the group, the overall length of the event, and the purpose of the event.

#### Types of Icebreakers

According to the purpose of usage, icebreakers can be categorized into two - Facilitating introductions and Topic Lead-ins. Facilitating Introductions are used to help participants to ease into the group and to get acquainted with each other. Topic Lead-insare used to identify needs and goals, share information and resources.

#### Facilitating Introductions

The introduction icebreakers are best used on first days of school when trying to learn student's names and a little bit about them. Here are some excellent Facilitating Introduction Icebreakers:

### Fruit Talk

Fruit talk is a game that helps to sharpen listening skill and improve select vocabulary. It is a game of giving and following directions. Before commencing the game, instruct the group to follow the directions if and only if it is prefixed with the name of a fruit. It goes like Apple says Stand up, Orange says smell a flower, Pineapple says..... The students should not follow the direction unless it follows the name of fruit. To muddle up teacher can use the name of vegetables or flowers.



# Well Begun: Icebreakers as an Effective Tool My Name is?

Here each one should introduce oneself by stating his/her name along with an adjective that not only describes a prominent character, but also starts with the same letter of his name. Example: dynamic Dave, generous George. Birthday String

Descend in a line in the order of birthdays. Go around the class like a train. (Improvise it with height, length of hair etc.) Topic Lead-ins

These will direct the student into the content that will be taught. The icebreakers can be used to generate interest in a topic and activate the student's prior knowledge. Topic Lead-ins will encourage the sharing of information and resources (Dover, 2004). Some examples for topic lead -ins are cited below.

# Multiple Choice Tests & True/False Quizzes

Giving multiple choice tests or true and false quizzes before introducing a topic or reading engages students, activates a student's prior knowledge, and will encourage the sharing of information and resources. The teacher can discuss the answers with the class before and after the lesson in order to focus on the important parts of the topic being taught.

# Personalize it

The teacher talks about a topic by relating it to a personal reference or story. The students are then to figure out how they can relate the topic to a personal reference or story. Role Play/Skit

The whole group can be split into small ones. Each group is encouraged to come out with an enacting of the topic given that may be related to the theme.



# Picture Story

To each group give a set of four or five pictures cut out from magazines, and get them to create a picture story – teacher can keep the context very open, or have them focus on a particular tense or function. If we focus on oral communication, let them form the story extempore. If we want to focus on writing, have them write. When they've finished, have each group tell their story to the rest of the class.

Icebreakers are used for teaching and learning the language in a creative and critical way. Right application of apt methods serves a lot for a successful classroom. Intention of each method should be to motivate the learner to proceed further. A motivated group gives a positively receptive result in the classroom. Icebreaking is an effective method that can produce a motivated starting to proceed further. The motivation that is acquired from appropriate icebreakers can energize and can provide a sustain behaviour. The energy acquired can be channelized for better performance. Not only energy but also assures the students' interest and behaviour for longer period in the activity.

According to the veteran psychologist Hebb, efficiency and adequacy are increased in motivated state of behaviour. Motivation can direct and regulate behaviour. A motivated group can be described as guided, directed and goal oriented. A motivated group can be specifically directed in a purposeful and persistent way. In a motivated condition, the target group can be easily controlled by a facilitator to reach the desired end. It does not move in haphazard way.

To conclude, icebreakers are a sort of starters. It just warm ups the entire session. If the warm up is perfect, the continuing sessions will be successful else, it will get jerks and perks at turns. Normally, an icebreaker does not demand any higher order settings. It is the attitude, planning and enthusiasm of the facilitator that is transmitted as motivation to the target group. Once the facilitator reaches the goal, he is sure to have a safe and receptive platform to work with the core part of the session. Icebreaking sessions are often misunderstood as mere waste of time or distractions. If used wisely, it is a powerful staff in the facilitator's hand to lead the group further. Games are no more mere games. They are gallows to reach one's Goals.



Well Begun: Icebreakers as an Effective Tool

#### Reference

- Beat the summer heat. *Plan icebreakers for fall*. (1998) Retrieved September 24, 2004from http://www.teachnet.com/how-to/backtoschool/071298.html
- Whole Person Associates: Stress & Wellness Specialists. Instant Icebreakers.RetrievedSeptember24,2004.http://www.wholeperson.com/wpa/tr/ice/intro.htm
- Chauhan S. S. *Advanced Educational Psychology*. Vikas Publishing House Pvt Ltd, New Delhi, 1988.

Doff Adrian, Teach English. Cambridge University Press, UK, 1988.



# Gamification of Learning: Using Game Elements in Non-Gaming Contexts

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> Gamification of learning is the introduction of game elements that can influence behaviour in a non-game context, such as school environment. The term qamification, coined in 2002, is not a one-dimensional reward system. Rather, it takes into consideration the variety of complex factors which make a person decide to do something; it is a multifaceted approach which takes into consideration psychology, design, strategy, and technology. The advancement in mobile technology have allowed for the exposure of a variety of qamification initiatives in many contexts, including education. The use of game elements such as points, badges and leaderboards to motivate behavioural changes and track those changes in online platforms. The gamification of learning is related to these popular initiatives, but specifically focuses on the use of game elements to facilitate student engagement and motivation to learn. A study results of Gamification of learning revealed that students who completed qamified experience has got better scores in practical assignments but performed poorly on written assignments and participated less on class activities. This article focuses on the ways to gamify education in classroom and the benefits of Gamification.

Keywords: Behaviour, Learning, Curriculum and Motivate.

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# Introduction

One of the trending educational approaches that motivate students to learn by using game elements and designs in learning environment is called

Gamification of learning the ultimate aim of Gamification is that to maximize the enjoyment by capturing the interest of the learners and engaging and inspiring them to continue learning. Gamification is the process of defining and introducing game elements to motivate players to continue playing and using those elements in a non-game context to influence behaviour. In educational contexts, Gamification can potentially influence desired student behaviour which includes attending classes, focusing on meaningful learning tasks and taking initiative.

There are two forms of Gamification, structural with no subject matter changes and the altered content methods that adds subject matter. Games applied learning are serious games, where the learning experience is centered on serious stories. These games provide point, leaderboards, direct competitions and stickers or badges for the successful completion of learning. The educators tested this gamify educational approach have seen positive results and also noted that it helps in retaining the content learnt.

#### Ways to Gamify Education in Classroom

There are variety of ways to introduce Gamification of education in classroom. Here, I am providing few ideas that can be used for Gamification to make learning more engaging.

Gamification in Grading: Students' grades are determined by the amount of point they have accumulated at the end of the course, in other words, by how much they have accomplished. Students are progressing towards levels of mastery, as one does in games. Each assignment and each test feel rewarding, rather than disheartening. Using experience points allows educators to align levels with skills and highlight the inherent value of education.

#### Award Students with Badges

For each assignment completed, award students with badges. This may seem like a regression back to Kindergarten stickers of gold stars, but it's

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working for Khan Academy. As students watch instructional videos and complete problem sets, Khan Academy awards them with points and badges to track progress and encourage perseverance.

#### Integrate Educational Video Games into Your Curriculum

The use of games allows students to fail, overcome, and persevere. Students are given a sense of agency—in games, they control the choices they make, and the more agency students have, the better students do. Instantaneous feedback and small rewards (or big ones, like winning) are external motivators that work.

# Stir Up A Little Competition

Game mechanics of including a "tournament" module in learning platform found that the tournaments incentivize students to learn the material and practice. The use of the tournament function egged on some competition, boosted morale and got her students excited about demonstrating their understanding. It is also noted that the tool worked as a great equalizer among students. Introverts were able to demonstrate their knowledge of the material and participate without having to raise their hands. Most of all, "gamifying" the review of readings simply boosted the general energy of the class.

Implement a class-wide rewards system: Encourage camaraderie among students by setting up a rewards system where students achieve something as a team. For example, set a goal of 80% of the class passing an exam. As a reward, give the entire class bonus points or even a party. That way, students are working to master the material together instead of competing, and the highest-achieving students will help those around them.

#### Gamify Homework to Encourage Informal Learning

Ultimately, educators hope that games translate learning into informal environments. There simply aren't enough hours in the day for an educator. Games allow the curiosity and the learning to continue after the bell rings.

# Benefits of Gamification

Gamification initiatives in learning contexts acknowledge that large numbers of school-aged children play video games, which shapes their identity as people and as learners. Within games and other digital media, students experience opportunities for autonomy, competence and relatedness, and these affordances are what they have come to expect from such environments. Providing these same opportunities in the classroom environment is a way to acknowledge students' reality, and to acknowledge that this reality affects who they are as learners. Incorporating elements from games into classroom scenarios is a way to provide students with opportunities to act autonomously, to display competence, and to learn in relationship to others. Game elements are a familiar language that children speak, and an additional channel through which teachers can communicate with their students.

Some of the potential benefits of successful gamification initiatives in the classroom include

- giving students ownership of their learning
- opportunities for identity work through taking on alternate selves
- freedom to fail and try again without negative repercussions
- chances to increase fun and joy in the classroom
- opportunities for differentiated instruction
- making learning visible
- providing a manageable set of subtasks and tasks
- inspiring students to discover intrinsic motivators for learning
- motivating students with dyslexia with low levels of motivation

This game mechanic which involves tracking players' learning in the game, and responding by raising the difficulty level of tasks at just the right moment, keeps players from becoming unnecessarily frustrated with tasks that are too difficult, as well as keeps players from becoming bored with tasks that are too easy. This pacing fosters continued engagement and interest which can mean that learners are focused on educational tasks, and may get into a state of flow, or deeply absorbed in learning.

# Conclusion

Gamification in education often cite its improper use of rewards as a motivator. Critics argue that relying on games can be detrimental to intrinsic motivation. Receiving a badge for a job well done is meaningless without an understanding of what specific skills this badge rewards. We agree; games can't be used to replace pedagogy, but can be used to enhance the overall learning experience.

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#### Gamification of Learning

# Reference

- Deterding, S., Dixon, D., Khaled, R., &Nacke, L. E. (2011). From Game Design Elements to Gamefulness: Defining "Gamification." In MindTrek'II. Tampere, Finland: ACM. Retrieved from <u>http://dl.dropbox.com/u/220532/MindTrek\_Gamification\_PrinterReady\_110806\_SD</u> E accepted LEN changes 1.pdf
- Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification. using game-design elements in non-gaming contexts. In Proceedings of the 2011 annual conference extended abstracts on Human factors in computing systems (pp. 2425-2428). New York, New York, USA:ACM Press. Retrieved from http://portal.acm.org/citation.cfm?id=1979482.1979575
- Dewey, J. (2007). *How We Think (p. 108). Digireads.com. Retrieved from*<u>http://www.amazon.com/How-We-Think-JohnDewey/dp/1420929976</u>
- Jakobsson, M., &Sotamaa, O. (2011). Special Issue Game Reward Systems. Game Studies, 11(1), n.p. Retrieved from http://gamestudies.org/1101/articles/editorial\_game\_reward\_systms
- Kyvik, S., &Lepori, B. (2010). The research mission of higher education institutions outside the university sector. (S. Kyvik& B. Lepori, Eds.) (Vol. 31). Dordrecht: Springer Netherlands. doi:10.1007/978-1-4020-9244-2
- Lindqvist, J., Cranshaw, J., Wiese, J., Hong, J., & Zimmerman, J. (2011). I'm the Mayor of My House: Examining Why People Use foursquare - a Social-Driven Location Sharing Application. In CHI '11 Proceedings of the 2011 annual conference on Human factors in computing systems (Vol. 54, pp. 2409-2418). New York: ACM Press. doi:10.1145/1978942.1979295

# E-Advertisement Acts as a Mediocre for Creative Efficacious Language Acquisition

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> The objectives of this paper are to make the learners to use their familiar vocabulary to frame sentence structure on their own and to think creatively by using E- advertisement. This paper focuses on learners not to learn consciously but unconsciously to acquire second language English is widely accepted as a global language. It serves as a medium in bridging various nations and cultures. English language is a lingua franca because communication has become possible between people, who do not share a native language and dialect. In earlier days, English was considered as a second language because it has created a areat impact in all the sectors and its position as a second language had shaped into first language. In the Modern era, the advertisements have become fascinating throughout the world. By E-advertisement the learners can create a new environment, and they start to acquire the language unconsciously. It is one of the easiest way to communicate with society. E- Advertisement products are also a part and parcel of our day to day life. Almost all the advertisement uses their taglines to attract people in the world. These E-advertisement are formed with imagination, creativity and thinking, which can enhance the language skills of learners through language acquisition.

Keywords: Communication, Cognition, New Environment and Fascination.

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# Introduction

Globalization has made English as a global language that acts as a thread to connect the whole world with effective communication. English language can be acquired in an effective and motivating way through advertisements. Advertisements facilitate language acquisition in a casual setting. These advertisements can provide a vivid contrast to the traditional classrooms. Through advertisements, language learning experiences readily become a stimulating source of fascination, personal growth and breakthrough for the learners where the learners get a chance to practice many different skills and acquire language easily.

Language acquisition is different from language learning. Language ought to be acquired and not learned. Learning language is using the brain to analyze English grammar, memorize English vocabulary, and translate English messages. This is the process used in schools to make the students well versed in English. The learners consciously study these methods in English, word by word and rule by rule. The result is that the learners know a lot about English grammar rules and translations, but they fail to speak well. Since, they are not aware of where to place the words that are learnt and the rules appropriately.

Language acquisition is the process of the learners acquiring language through a subconscious process during which they are unaware of grammatical rules. During the process of acquisition learners do not try to memorize words. Effortless learning can be done when the language is acquired. The learners obtain a source of natural communication through advertisements. In such situations the importance is on the text of the communication and not on the form. In this case, the learners communicate in English spontaneously where they are not conscious like being in a classroom, no matter if they are right or wrong. This principle stays as the root for the learners to acquire English through advertisements. They readily acquire the language to communicate with their peers in such an atmosphere.

Advertisements create an environment where the learners acquire the language and they do not learn the language. The presence of a teacher is not necessary in such situations even if a teacher is there, his role will be minimal. The learners join together during the activities and they only communicate in English where they are not conscious of the rules and regulations while speaking in English.

Learners find it comfortable to acquire a language by way of this method since, it is unlike the traditional classroom method. In traditional perspectives in education

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classrooms, learning is hardly learner centered where the teacher's role is active and the learner's role is passive. The learner's part is very active during other activities. Here the learners communicate with their peers without any hesitation. Since they are not bothered about the rules and regulations, they are not conscious as well.

A review was made with the M.A students of Bharathiar University in order to bring out the shy and backward learners to acquire English quickly. In the classroom, learners were motivated and then they were asked to give a speech and hardly few raised themselves to come forward and the restmaintained silence. Then the classroom atmosphere was altered into a casual setting and again the learners were motivated and were asked to communicate in English with their friends and they were asked not to bother about the rules and regulations. Names of four products were given to the learners and they were asked to tell the slogan just by viewing the advertisement once.

Most of the learners shouted the slogans without any hesitation. At the end of each advertisement all the learners were asked to share their views. Everyone communicated in English and it was noticed that they uttered few words and sentences which relates to the product. Here language acquisition has taken place since the students were asked to just enjoy and watch the advertisement and forget the rest. From the study, it is clear that the human brain acquires vocabulary sub- consciously than in a conscious way.

The learners who did not come forward at the beginning were asked to speak after the participation. After questioning them about their not coming forward, it was found that they were scared to speak because of their own suspicion of grammatical structures. The traditional method of learning stands as an obstacle for the learners. Interactive environment must be created where the learners acquire language and not learn it.

In such an atmosphere, the learners acquire language from what they do, through what they encounter and through natural environment that stimulates new interest. This indicates that, in order to acquire language, the learner needs a source of natural communication. Through these advertisements' learners acquire not only new words, but also learn its usage on their own and informal interaction among each other can also be developed.

These types of activities give a wide range of opportunities for language learning and also draw in energy and inspiration from all around. Learners feel the difference and pay keen attention towards the activities done, rather than sitting in stuffy classrooms.

#### Parameshwaran and Saravana

They actively participate and interact with their peer groups, who come out with different opinions during the course of the activities and without any hesitation they present their opinions and asked questions and doubts since it's not a classroom where one must stick to the rules and regulations.

In these kinds of activities usually the students join together to learn English, where the process of acquisition takes place. This shows that the learners who have memorized the rules of the language may be able to succeed on a standardized test of English language but may not be able to speak correctly. Hence advertisements help the learners to acquire language in a long run.

#### Reference

- Gertrude Nye Dorry. *Games for second language learning*. New York London Sydney Toronto. (1966): 6-31. Print.
- Guy, Cook. The Discourse of Advertising. London: Routledge. 1992.
- Jack C. Richards. *Communicative language Teaching Today*. Cambridge University Press. (2006): 1-36. Print.
  - Baer, John and Sharon S. M. C. Kool "How rewards and Evaluations can Undermine Creativity". *The psychology of creative writing* UK: Cambridge University Press, 2009.
  - Bollo Mallikharjuna Rao. "International journal of English and Literature" Use of media as an instruction tool in ELT at underground level 5(6) (2014): 141-43. Print.
  - Maria Clementine Joseph. "Improving vocabulary teaching practices at the tertiary level through the use of technology and reflection-for-action." *LANGUAGING A Journal of Language Teaching and Language studies.* 6 (April 2015): 49-70. Print.

www.smallbusiness.chron.com

www.googleschloar.com

www.languagegames.org

www.resreachersworld.com

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