Continuous Evaluation as a Transactional Network: a feedback loop of teacher educators, teachers and students

Elizabeth Mehta and Meenu Thomas
Muktangan

Elementary education in India has gone through significant changes from 2005 onwards when the revised National Curriculum Framework was introduced. The educational world expected something similar in 2009 when, as part of the Right to Education Act, the CCE pattern was implemented across schools. Its aim was to introduce a uniform, comprehensive pattern for the ongoing evaluation of student learning outcomes across the country. Whilst the idea was well intentioned, CCE has still not gained much acceptance either in the student or teaching community. Research has repeatedly demonstrated that extensive orientation and training programmes are an essential pre-requisite for the success of any educational innovation. Such programs, apart from costing a minimum of Rs 10,000 per year, require substantial time for teachers; away from the classroom. Many educational administrators and politicians are now questioning the efficacy of CCE. But, rather than giving up on such an educationally meaningful initiative, would it not be better relook at it?

As an answer to this question, we are presenting Muktangan’s “Curriculum Understanding and Development Meetings” (CUD Meetings) as an exemplar. We will show how this model conceptualizes evaluation as a participatory, active, ongoing process in which the teacher educator and teachers in interactive meetings continuously evaluate the teaching-learning process that they are offering students in the classroom. This ensures consistent feedback, which in turn facilitates further interventions according to the needs of individual students. We will also share our experiences with the designing of different rubric assessment systems, making the teaching-learning process more ‘outcome’ oriented whilst at the same time encouraging more student-centred, and flexible planning and implementation.
Thus, this paper presents an existing working model of continuous evaluation that brings the main stakeholders in elementary education together, namely; the teacher educator, the teacher and the student, creating a regular feedback loop regarding the teaching-learning process. This model is different from the existing assessment systems which unintentionally push individuals, who do not conform to standard, age-level expectations out of the educational system. Many survive by rote memorizing material that is developmentally inappropriate or leave the system entirely, viewing themselves as failures. The Muktangan mode, with its unique features of “CUD Meetings” & “Assessment Rubrics” helps individual students, working in groups to work, each, at their own level, developing at their own pace. This pace is seen in many cases to speed up as they meet daily success rather than failure.

2.

Vigyan Saralikaran Prakalp
Indu Parashar
(Paper in Hindi)

3.

Exploring agency and multiple expressions: Creative arts program in a low income secondary school model in Bangladesh

Alia Kamal, Researcher
Institute of Educational Development, BRAC University (IED-BRACU)

This paper explores the effect of the inclusion of the creative arts program (CAP) in SSCOPE, a low-income secondary education model for adolescents from lower socioeconomic status (SES) backgrounds. The education model is developed by the Institution of Educational Development, BRAC University (IED, BRAC U). The aim of CAP is to introduce a holistic approach to the arts, incorporating elements of visual arts, movement and drama into the school program. Unlike the traditional arts class in secondary schools in Bangladesh, CAP puts a greater focus on the creative process of ‘art making’ and less focus on gaining aesthetic skills and techniques. As such CAP is inspired by the philosophy of art therapy where the creative process of the arts is given greater importance than the final product. CAP also aims to transform the classroom into a fluid and creative space where imaginative thinking is encouraged. The non-hierarchical learning space that CAP tries to create is an attempt to negate the hierarchical nature of education inside Bangladeshi classrooms, which focuses heavily on rote memorization. More often than not, student performance is evaluated based on standardized tests and national level examinations. This exam driven and memorization culture makes the classroom static where teaching and learning becomes a hierarchical and power laden process. There is little room for creative expression, which should be seen as a fundamental tenet for holistic education. The creative arts allows for the social, emotional and cognitive development of the child. Research has shown higher exposure to the arts for children, particularly from lower SES backgrounds, results in a range of positive academic and social benefits in the short and long run. Keeping
all these socio-economic factors in mind, CAP was developed and implemented. The CAP sessions are not conducted by teachers, but by Shomaj Shongees (SS) that could be translated to “friends of the community.” The SS are women of ages 24-25 who live in the same community where the SSCOPE schools. Prior to CAP, SS also conducted activity-based sessions on Sexual and Reproductive Health and Rights and Gender (SRHRG) and psychosocial wellbeing with the students. Given that the SS and the students already shared a friendly rapport, it was possible to instill the theme of non-hierarchy and fluidity of the CAP sessions in the classroom settings, where the SS allowed a space for multiple ways of expression among the students. CAP was initiated at two SSCOPE schools for six months in the year 2014. The total number of students in the CAP program for both schools was 81 (39 in one school, 42 in the other). There were two control school groups where CAP was not carried out. Data was collected at the end of the program in the form of questionnaires from CAP students, interviews of SS and in-class observations of the author of this paper. The results indicate that there was an overall positive outcome of the CAP program for both the students and the SS. According to the SS, the attendance rates for CAP students were consistently high in comparison to the control groups. The students and SS both enjoyed the non-formal atmosphere as well as the opportunity to engage in fun and imaginative art activities. It was observed that students expressed more and were more enthusiastic about group collaborations. Through this paper, it will be possible to see how CAP aims to curb dropouts among students by ensuring agency of students and by creating a non-hierarchical learning space where both students and the SS can learn from each other and thrive.

4.

Can teachers learn from children, and build upon their curiosity, compassion and empathetic value system?

Akanksha Agarwal
Design for Change

Design for Change designed a thirty hour curriculum for middle school students which provide them with a hands on experience of design thinking process. DFC Curriculum incorporates the core values of Design Mindset, which are Empathy, Optimism and Collaboration. These values are put into practice through the four steps of Feel, Imagine, Do and Share. Children go through these four steps to break down a problem into different parts. Most importantly, they are introduced to look into the multiple perspectives about an issue. The focus is on people who are involved in the problem and the ability to understand the problem from their perspective. Next they learn to incorporate this understanding into the solutions they design for their chosen problem.

This curriculum has been put in a textbook format and is currently being piloted in sixty four schools across India. The schools have been chosen to represent a diverse sample. We have included different education boards from CBSE, ICSE, IGSCE and State Education Boards. Further both private and public schools are a part of the study. Children from different socio-economic backgrounds are being reached out to in this diverse sample of schools.
DFC Curriculum is guided by the belief that children have the potential to bring change and the FIDS process is a platform to unlock their creative agency. The curriculum has been designed in a manner where students are engaged in discussions where they bring forth their own opinions about the world around them. The first step of drawing maps gets them to re-observe the world around them and notice the un-noticed in their own surroundings. Since, teachers do not enter the classroom with content but rather a process, they are on an equal platform with the students. The lesson plan is determined by student voices and they become active agents in this process of learning. Therefore, teaching design thinking offers teachers a new experience of building relationships with their students and learning with them.

Through this research, we have explored the impact of design thinking on teacher pedagogy. Our research objectives for this study have been to understand the change in the relationship between teachers and students because of

1. Increased belief in children’s capabilities
2. Increased understanding about what motivates/bothers children
3. Increased understanding of children to enhance student learning

We have been conducting interviews with both students and teachers to understand the shift in teaching practices in a set of fifteen sample schools from our sixty four pilot schools. Sampling has been done keeping in mind the diversity of schools. Through both in-depth interviews and focus group discussions, we have insights from teachers on how their perspectives about their students are shifting as they see them taking more responsibility and initiative. Furthermore, the space for discussions in classrooms where students can freely share their thoughts has allowed teachers to get better understanding and build stronger relationship with their students. Different processes of design thinking have allowed teachers opportunities to learn with their students as they collaboratively work on this project.

Through the paper, we would like to elaborate on the shifts in teacher mindsets about their students while teaching them design thinking.

5. Pratham Open School of Education

Renu Seth

Session 2- 11:30-13:00

Papers: 6-10

Chair: Ankur Sarin
Faculty, IIM-Ahmedabad

Co-Chair: Seshagiri Madhusudhan
Education Specialist, UNICEF, Chhatisgarh

Venue: Audi-2, KLMDC
That the children from a disadvantaged background display poor learning outcomes and high dropout rates is a distinct reality, however sad or disappointing it may be. It is quite evident that conventional models of education are not really tailored to suit the specific needs of this vulnerable segment of the population. Armed with the conviction that we need to do something different, something innovative to save these children from falling through the cracks, we initiated a humble attempt to bring the light of education into their lives. The guiding principle of Roshni Educational Society, Faridabad, is to view each child as a distinct being with unique needs and customize their learning plan based on their needs and learning potential.

The story of Roshni started with an empathetic concern for the children of construction and domestic workers who roamed around aimlessly in the vicinity of their parents’ workplace inviting disdainful looks of the neat and clean well-off children of the area. What started as a small attempt to make a handful of children literate has morphed into an organization committed to the cause of transforming the lives of underprivileged kids in the area. Roshni formally came into existence in 2007 and at present there are 250 children under its wing.

We have never believed in the ‘one size fits all’ philosophy. Our system is very open, flexible and transparent. All the admissions are done on a “first come first served” basis. There is no age bar and children do not have to take any admission test. We follow a student-first approach in fulfilling our key goal of making our students contributing members of society. Our four-pronged approach includes imparting literacy and numeracy; promoting hygiene and health, inculcating values and working towards their social inclusion. Each student attends classes to attain a certain level in the two centres run by Roshni. Based on each child’s potential and goals, there are various options made available to them. One, they can continue their learning at the Roshni School. Second, we support keen and academically oriented kids by putting them into CBSE affiliated schools in the area. Third, in the case of
those who because of any limitation cannot join a regular school, we support their education through The National Open School. Moreover, vocationally oriented students have the option of learning tailoring or computer to help them acquire the relevant skills in these areas.

No doubt, the origin of such work lies in concern and compassion. As for collaboration, we have established meaningful partnerships with various stakeholders from the local industry as well as college and community members. One such example at creating synergies is our collaboration with DAV Centenary College, Faridabad, by way of motivating the college stakeholders to share knowledge, physical space and resources with the Roshni children. The attempt has been quite successful as young students and the faculty of the college are learning to spare their time and share their resources with the school children.

The glow and shine one sees on a disadvantaged child’s face when she is given love, care and compassion dims every other shine of the world. This is just a glimpse of the small effort have made here in Faridabad and we would love to share this interesting story with others if given a chance to make a presentation.

9.

Education through an Integrated, Micro-level Approach

Virendar Khatana
Project Director
Joint Initiative for Village Development (JIVA)

A rapid assessment of the Sakrawas Panchayat in Rajsamand District of Rajasthan, India was conducted to inform the design of a five-year integrated development project, later named the Joint Initiative for Village Development (“JIVA”). The assessment, followed by a census baseline study six months later, found that the standard of education in the villages was so poor that the children studying in class VIII were not able to read or write simple sentences in Hindi, and their numerical ability was equally as weak. To tackle high drop-out and low performance rates, JIVA established Education Resource Centers (ERCs) to provide after-school tutoring in the three project villages. By August 2013, 228 children in all five ERC’s, including drop-outs (under the age of 14 years) were enrolled in ERCs. All the drop-outs of upto 14 years were identified with the help of micro-planning and enrolled at ERCs. Majority of drop-outs were not willing to go the school again and JIVA began providing them life skills training which include topics such as basic calculation, reproductive health, and child marriage. Of the remaining 72% of total drop-outs, 60% who showed potential have been re-integrated into the government schools in the villages, 68% of whom are attending the schools regularly. JIVA would be presenting their experience on this integrated, multi-sector, micro-level approach to community development.
Mobile matters: BRAC experiences in mEducation

Wahid Newton
BRAC

Bangladesh experienced significant progress in primary and secondary education in the last 2 decades. Enrollment is up, classrooms are full of students (50-60 students) and no less than half of them are girls. A good portion of students represent first generation learner. Teachers’ education and development barely kept pace with changes that have been taking place in other areas too. This brought up questions associated with quality of education particularly in rural and remote areas. Some learners face challenges with particular subjects eg: English, Mathematics or Science. In many cases they fail to get required additional support due to different social and financial constraints.

Many countries across the developing world are also now using mobile technologies to increase and improve teaching and learning along with communication. This is especially valuable for rural and isolated schools with limited teacher, but also for overcrowded urban schools facing difficulties in monitoring vulnerable children. As network coverage continues to expand and reach more of the world’s population, the possibilities seem endless for delivering truly incredible volumes of rich academic content.

In the attempt to find viable solutions to these challenges, much hope has been placed in new information and communication technologies (ICTs), mobile phones being one of them. First, mobile phones are the most prevalent ICT in our country (120 million subscribers, as of November 2014) and the penetration rate is rising rapidly. If mobile phone can be used successfully in the teaching and learning process, they would become a popular and effective tool for supporting learners.

Considering these issues, BRAC Education Programme (BEP) has initiated the mEducation pilot activity in collaboration BRAC Institute of Languages (BIL) in 36 secondary schools of 4 sub-districts in July 2013. It is an attempt to find a viable solution to the challenges faced by students by providing academic support. In this effort student can make phone call to resource person for their academic queries through mobile phones. Subject’s experts will receive calls and provide instant support over mobile phone from 6 pm to 9pm everyday for English and Mathematics of class 6 and 7.

Quality education has no alternative and answers to its associated problem are not always given. Technology however has a role to play and as experiences indicate careful planning, thoughtful process can make it meaningful and viable. Initial experiences make known that student especially girls, childhood disables and first generation learners found it very helpful as they cannot go out at night or do not have support at home. Parents and Teachers, especially in rural areas, see technology as an eventual serving hand for the students.
Session 3- 14:00-15:30

Papers: 11-14

Chair:
C. K. Koshy
Member, Governing Board,
Gujarat Grassroots Innovation Augmentation Network (GIAN)

Co-Chair:
Ankur Sarin
Faculty, IIM-Ahmedabad

Venue: Audi-2, KLMDC

11.

Educational Transformers: Dare to Dream

Anvit Phatak
B.E. M.Ed.
Pune University

Need: India is poised to be the country with the greatest working human resources. Current practices of teacher training and upgrading curriculum may not be fast enough to keep pace with the empowering our young Indians into resources that country expects. We need a strategy that can be simpler, spread faster, cost lesser, show better results than any of the current reforms have shown. Concerns: Can such a strategy exist at all? Is it even fair to expect a reasonable level of success knowing that implementers of the reform (teachers, parents, management etc) have been brought up in the existing system? Haven’t we exhausted our bag of tricks yet? Can the strategy be made sustainable? Life-cycle of a reform: We have come to believe that education should be child-centered, skill oriented. Educators, Teachers, Parents and Management, all plan the education delivery for the child in the best possible way. Every reform comes with a bagful of tricks and techniques. The master trainers demonstrate it to the teachers. For some time the effects of the reform seem promising, but very soon the momentum is lost. The reform does not sustain. The implementers lose sight of the purpose for which the new system was introduced. The purpose becomes the system itself, the means become the end. Such is the life-cycle of a typical reform. Walking on a tight rope Yet there have been some reforms that have lasted long enough to be noticed. It is worth pondering over the reasons for their long life. Large scale implementation of reforms requires a system to be in place, rigid enough to ensure that it is implemented and yet not so rigid as to lose sight of the purpose. For example, we are trying our best to achieve uniformity in school education across the nation. We have
attempted to create a system in the form of a curriculum, both, strict enough to achieve a minimum standard, as well as flexible enough to incorporate local variations. The good effect of this is that many schools re-align and do achieve the minimum standard set. The downside is that they aim just to hit the minimum bar and barely achieve it. Possibilities while disseminating the reform through master trainers, will educating the institution heads be more effective than directly educating the teachers? Can student participation be increased in day to day decision making in school? Can schools be shown a career path, so that they can look forward to achieving the next higher level after achieving the minimum norms? Can school accreditation exist, but not be made compulsory? Can accreditation process detail the kind of interaction expected out of the students and teachers within the institute? Can we make learning purposeful? Can we have an efficient STA (Student Teachers Association) and thus eliminate the necessity and the trouble the school management faces in interacting with the parents of the students? Backdrop of an Experiment: Millennium National School, Pune is in a unique phase. The school began on an experimental note in the year 2000, providing for extended hours of schooling instead of 5 hour model. It did quite a few innovations new to schooling then. It achieved the support of the parents, which ultimately decides the success of a school. After 11 years of living successfully through the reform the school mourned for its founders who expired in a tragic accident in 2011. Three years hence, the original founders being no more, the school has fallen in a trap. It is looking for answers which the founders might have had, but without their vision, decision making has been a tough job for the management. The school however has always been very open to introspection and change. This sets the backdrop for the experiment. Expectation: The transformation of a school into a learning organisation should be able to showcase not only the end product, but a model for the process of transformation. If it can be done for a school, conventional in its thoughts, we can hope to duplicate it not only at a mass level for similar schools, but to different models of schools as well. The reform will affect all levels of organisation, all stakeholders because everyone is in it together. It will be democratic yet authoritarian in some way. The final expectation is that the classroom becomes an exciting, enriched space. Children and teachers ensure that education becomes relevant to them. More of the world is brought to the school. More importantly the reform would make institutions literate enough to understand what reforms to adopt and what to refuse.

12.

Plugging Leakage of Vulnerable Student Supply Chain: An Innovative Interventional Initiative

Narayan B.Iyer, Jayaraman A.P, Ramakrishna Pillai A.
Indian development Foundation

Realizing that a seamless zero-drop out in the class segment 4 to 8 of Student Supply Chain (SSC) Management is vital for economically disadvantaged societal strata, Indian
Development Foundation (IDF) conducted a root cause analysis and isolated Home work noncompliance as the single critical variable of school drop-out proneness. Noncompliance of teacher given home work triggers a chain reaction beginning with the ire of the teacher, sneer of homework friendly co-students leading to the eventual exit of vulnerable students from SSC. Numerous remedial measures are in place. IDF has designed a low cost, high value innovative interventional initiative within the constraints of resources and restraints of logistics. The teacher centric, multi class, outside school time endeavour is popularly known as Bal Gurukul System (BGS). After establishing the first ad hoc BGS for poor rural children in Rajasthan in 2005 and systematically continuing the initial phase, five variants of BGS Version 0 were test run and a standard model was abstracted within a year. Subsequently over 5 years 170 units were deployed on demand driven mode negating geographical adjacency diffusion model of penetration. Ingrained in the BGS are cross cutting concepts of women empowerment and inclusive growth of the girl child. BGS centres around multi class serving dedicated woman teacher in girl majority class setting. This paper highlights the strategy of innovation within innovation, the tactical leveraging of a national NGO and the operational outcome over a five year period. BGS stands validated as a viable and sustainable interventional model to safeguard SSC in drop-out prone vulnerable segments of society.

13.

Changing Dynamics of Higher Education Research and Innovation in India: Key Issues

Sheeraz Ahmad Tantray
M.Phil-Ph.D
Central University of Jammu

There is the need for dynamism in higher education, research and innovation in India due to changing lifelong learning needs, growing communication and information technology usage and enhanced networking and social engagements, both with the economic sector and community at large, which have become strategically interlinked in terms of their objectives and modalities. The widening gap between basic and applied research is dominating the challenge of “think global and act local”, necessitating flexibility in research systems and pragmatic approaches serving societies in the widest sense. The advent of knowledge society along its principal engine, the knowledge economy and widening “Digital Divide” has shaped the social change resulting in the acceleration in the risks of marginalisation. With most of the innovations occurring outside academic environments, the diminishing dividends of Indian higher education with public money at stake has failed to translate the knowledge into innovative actions thus losing competitiveness in the global knowledge society. The need for growing dynamism of “research for innovation” and “research on innovation” with meta-analysis of crucial knowledge systems, the need for growing partnerships between governments, the economic sector and the research institutions so that new knowledge becomes linked to developmental goals has been thoughtfully deliberated in the present
paper. Though the analysis focuses on redefining of Indian higher education system, the global trends and future directions are also mentioned therein.

Keywords: Applied research, Knowledge Economy, Digital divide, Innovation.

14.

**Shift from Structured to Unstructured Education System**

*Sachin A Mandavgane*

Associate Professor  
Department of Chemical Engineering  
Visvesvaraya National Institute of Technology, Nagpur

Over a period of time a pedagogy is developed with a focus on ‘how to think’ than ‘what to think’. Its blend of project based learning, participatory learning and evolutionary learning. Effective use of ICT, social media (Facebook and Whatsapp) is done. Assessment is based on the response to unknown challenges than correctness in solving known challenges. Entire process of teaching-learning (education) is very structured. Everything is prescribed and recommended. The challenges thrown to pupil are also either ‘known’ or ‘similar’ to known. Obviously those who excel in this process lead very structured, safe, conventional and ‘comfort zone’ life. They live above ordinary (may be good) life but rarely extra ordinary life!!!

We find that those who lead extra ordinary life, life of a torch bearer for the society or who are synonym of excellence generally have not shined meritoriously during their learning process. During their studenthood most of them were either mediocre or drop out or low profile or missed out from the main stream or have taken unconventional education. In short they somehow missed the ‘skills’ imparted through teaching system.

One change I would like to propose is to make education system unstructured. Let the thick walls of examination ‘pattern’, assessment ‘schemes’, ‘framed’ course curriculum and all such rigid structures be demolished. Instead let student be taught fundamentals of the course and made to ‘explore’ the course of his own. (Being a faculty of Chemical Engineering I can very confidently state that, basics of any course of Chemical Engineering can be explained and taught in few hours in a day or two).

An eco-system should be developed where a student will be provided a kitchen space, groceries, utensils, a recipe book and even access to a foodie channel. Let teacher be all along with him for hand holding, guiding, cautioning and teaching just ‘fundamentals’. In short very limited ‘class room’ contact time and maximum ‘student-teacher’ meeting time.

Let entire education process be made ‘as much as’ possible unstructured and close to real life. Let the students be assessed based on their response to ‘unknown’ challenges/situations. Structured program has smothered innovative ideas, risk taking ability and killed independent thinking. The system is extremely good to produce a disciplined and obedient herd
The approach to transform from structured to unstructured education system is explained by using author’s courses as a case study.

**Session 4- 16:00-18:00**

**Papers: 15-19**

**Chair:**  
K B Jinan  
Visiting Faculty, NID-Ahmedabad  
**Co-Chair:**  
Ankur Sarin  
Faculty, IIM-Ahmedabad

**Venue:** Audi-2, KLMDC

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Innovation in education: introducing creative training in language, intellect, and originality

Prasad Sundararajan  
Visiting Faculty  
Chandragupt Institute of Management Patna  
Chajjubagh, Patna

The ‘innovation’ proposed is about the application of a **new methodology** for training high-school level students for evolving their ‘language’, ‘intellect’, and ‘originality’ to function at higher levels of entelechy. By research data, these three were found to be critical in ‘originalizing’ the knowing, and ‘translating’ that knowing into doing and being.

The methodology, named ‘**Framework of Creative Entelechy**’ has been testified for its efficacy by feedback reports and behavioural event interviews of a sample of those who had undergone training since 1995.

The training may be conducted by the regular teachers after self-learning the methodology which is basically very simple that even class VII students in village schools can follow -but with prospects of significant positive long-term consequences. Not only for the learners, but perhaps, much more for the teachers also. The sessions may take about 10-14 days and to be held prior to the beginning of academic years.

**Key-Terms**

**Entelechy**  
The concept ‘entelechy’ refers to the unfolding of a potential; the realization and actualization of a potential as contrasted with its mere presence. Entelechy occurs in almost everyone due to normal survival-sustenance activities as well as conventional schooling. Therefore, the requirement proposed is ‘creative entelechy’.

**Intellect**
The concept of ‘intellect’ is used to represent collectively the mental engines or abilities of attention, thinking, reflection, incubation, intuition, visualization, imagination, conceptualization, sensitivity, etc.

**Originality**
The concept of ‘originality’ is used to the facility of instantaneous response, behaviour, action, dialoguing, etc according to the requirements of a situation.

16.

**Changing role of the teacher in building environmental leadership skills amongst students - experiences from student environmental action**

Annie Gregory  
MS Natural Resources and Environment (Behaviour, Education, Communication)  
Centre for Environment Education

Pramod Sharma  
Pursuing Ph.D in Education from Calorx Teachers University  
Centre for Environment Education

Even as actors in the education recognize the need to build students skills to join a global workforce and adapt to a constantly changing world, from our interactions with teachers, we see that teachers find it difficult to teach students in ways that achieve these objectives. Environmental education (EE) and Education for Sustainable Development (ESD), as with all other subjects in the school is teacher-led with students as passive receivers of information. Studies in environmental education indicate that to build environmental leadership students need to be engaged in real life experiences of planning, implementing, problem-solving, working as a team, etc. To address this issue and to make teachers understand this as a learning process we thought it necessary to show examples of what student initiated environmental work could look like. What could be their learning outcomes? What environments facilitate such work? What skills/competencies do students acquire? What role does the teacher play? The paper shares experiences from the Paryavaran Mitra Young Leader for Change, the student initiative of the nationwide sustainability and climate change education programme, Paryavaran Mitra. In this, students from rural and urban areas prepared and implemented action projects on environmental issues in their vicinity. We also discuss and invite inputs on the aspects of the initiative which might connect or overlap with what we know about “innovation” and “entrepreneurship” and how we can take this initiative forward informed with this knowledge.

17.

**Empowering Quality of Primary Education at the Grassroots Level Through Volunteer Educators: An Interpretive Case Based Analysis**

Rajneesh Choubisa  
Assistant Professor (Psychology)  
Department of Humanities and Social Sciences  
BITS Pilani
In some critics viewpoint, the state of primary education is tenaciously bad and requires ineluctable attention towards its empowerment. As with the solutions, this can be done either through formulating convincingly innovative interventions that can raise the proverbial bar high enough or by engaging communities and stakeholders. As per statistics, allmost, all the researches that have been conducted and carried out by the centre and state government institutions and other bodies have highlighted some serious concerns in their documentations. To address one such problem as underlined by these agencies, an innovative inititaive was taken by a student group in BITS Pilani whose intentional efforts culminated into establishment of a not for profit organization named "Nirmaan". With the passage of time, the organization has earned it reputation through its various project based activities and efforts. One of its project requires student volunteers to educate rural students in the vicinity of the institute during their free time and the targets of this are achieved in a skillfully coordinated manner. This case based analysis provides an experientially interpretive understanding of the various dividends that followed and resulted in the upliftment of the status and quality of primary education at the designated interventional sites.

Keywords: Volunteer-Educators, Empowerment, Nirmaan, Case-Analysis etc.

18.

Creating conditions for creativity in schools by responding to the inherent nature of child and biological nature of learning: Lessons from indigenous cognitive conditions and the re imagining schools initiative at Sadhana village school, Pune

K B Jinan
Visiting Faculty, NID

The author of this paper has spent several years working with non literate artisans in various parts of this country not only studying their knowledge system but also the conditions that enabled the creation of knowledge and formation of their world view. Naturally apart from studying the adult life, children have been the focus of the study as children are the knowledge link between generations and how they learn, what they learn etc was very crucial aspects that needed to be studied to understand the cognitive process among traditional communities. This has led me to set up an initiative in Pune called re imagining schools. The proposal is based on these experiences.

Learning is the basic nature of life. Natural process of learning by its very condition is an act of creativity because knowledge is created by the learner as they engage with the world. Children naturally study the way the world looks, the quality of its materiality and various phenomenon that happens around them. This is the most scientific and natural way of understanding the world, sharpening the tools for understanding and developing the qualities to be in the world. The holistic nature of the world awakens the holistic nature in the child.
According to Mahatma Gandhi education system should be based on personal, real time life experiences. He believed that education should be self-supporting and local craft centric; which essentially enables an individual to earn decent living and thus cut the root of unemployment. Gandhiji believed that Characteristics of craft centered curriculum stresses on co-operative activity, accuracy of planning and individual responsibility. Here, an endeavor has been made to prove the relevance of Gandhian education & economic model in present economic scenario, through a case study of a fervent Gandhian by heart Veljibhai Desai. The case takes you through his life experiences which enabled him to create his own social entrepreneurship venture. Veljibhai incorporated a proprietorship firm called “Tiny-Tech Plants™” in Rajkot in the state of Gujarat, India in 1982. Tiny-Tech plants as an enterprise is mainly engaged in developing and disseminating affordable rural machineries with local assistance as advocated by Mahatma Gandhi. Another firm associated with Tiny-Tech Plants is Aadhunik Global Energy established in the year 2002. This firm is basically engaged in manufacture and development of low-cost renewable energy technologies. Today Tiny-Tech plants and Aadhunik Global Energy is successfully developing and exporting its machineries to 109 countries with an Annual turnover of INR 4 crores (including export business of Aadhunik Global Energy).

Thus, through Gandhian Veljibhai’s anecdote. We attempt to show the outcome and possibilities of motivating the youth towards sustainable entrepreneurship, which can be proved as an effective step towards the sustainable rural development of India, as favored by Mahatma Gandhi in his book “Hind-Swaraj”.

Keywords: Vocational education, Rural development, Gandhian-economics, Social Entrepreneurship, Frugal Innovations