INDIAN JOURNAL OF ADULT EDUCATION

Editor's Note

ARTICLES

INDIAN JOURNAL OF ADULT EDUCATION

FORM - IV

1.	Place of Publication	Indian Adult Education Association 17-B, Indraprastha Estate New Delhi - 110002
2.	Periodicity of Publication	Quarterly
3.	Printer's Name Nationality Address	Dr. Madan Singh Indian 17-B, Indraprastha Estate New Delhi - 110002
4.	Publisher's Name Nationality Address	Dr. Madan Singh Indian 17-B, Indraprastha Estate New Delhi - 110002
5.	Editor's Name Nationality Address	Dr. Madan Singh Indian 17-B, Indraprastha Estate New Delhi - 110002
6.	Name and address of individuals who own the newspaper and partners or share holders, holding more than one per cent of the total capital.	Indian Adult Education Association 17-B, Indraprastha Estate New Delhi - 110002

I, Dr. Madan Singh, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Dated: 10-02-2018
New Delhi

(Sd/-)
Dr. Madan Singh
Signature of Publisher

This issue of the Journal is dedicated to the memory of Shri Jagdish Chandra Mathur (fondly called JC Mathur) on the occasion of his birth centenary year. He was born on July 16, 1917 in Khurja, Uttar Pradesh and had his school education in JAS High School where his father Shri L.N. Mathur, an ardent follower of Gandhian principles was the Principal. J.C. Mathur was a brilliant student right from the beginning who secured first position in English Literature in Post-Graduate Degree from Allahabad University. He was a multifarious person shown keen interest in his life time to education in general and adult education in particular, administration, mass media, drama, literature and institution building for propagating the rich culture of India.

Shri Mathur was an ICS Officer of 1941 batch, Bihar Cadre. In the early years of his career he served as SDO, Hajipur and District Collector, Gaya. Thereafter, he was Education Secretary, Bihar from 1949-1955. He was instrumental in establishing Bihar Rashtra Bhasha Parishad and four research institutes in Bihar apart from founding 'Vaishali Sangha', an organization devoted to preserve rural cultural forms of North Bihar and reviving 'Vaishali Mahotsav', the famous cultural festival which had its beginning centuries ago. He also served as a member of the committee appointed by the Govt. of India in 1954 to plan Higher Rural Education.

In Govt. of India he was Director General of All India Radio between 1955 and 1961. The Television was introduced in India for the first time during his tenure in 1959. National programmes of music and drama on Radio which featured performances of top artists of the country and popular programmes like 'Vividh Bharati' and 'Hawa Mahal' were his contribution. From 1964 onwards he served in the Agriculture Ministry as Joint Secretary and Additional Secretary and was in the forefront of the thrust given by the government to the initiation of Green Revolution. With his rich experience in the areas of mass media and agriculture he was the brain behind formulating Farmers Functional Literacy Programme jointly implemented by three ministries – Agriculture, Education and Information & Broadcasting. Shri JC Mathur became Life Member of Indian Adult Education Association on December 29, 1950. He served a few years as a member of the Editorial Board of Indian Journal of Adult Education and for some time he was the Chairman of the Board and Editor of the journal.

He has written a number of papers and books on various topics related to adult education and mass media. To mention a few – paper on "Mass Media and Freedom of Expression" presented in the seminar on Human Rights organized by United Nations at New Delhi in 1962, Monograph on "Rural Development and the Indian Villager" prepared during his Fellowship in the Centre for International Affairs, Harvard University, USA in 1963-64, working paper for Round Table on Lifelong Integrated Education (published in IJAE March 1968), Pioneering book

titled "New Lamps for Aladdin" on the impact of mass media on developing societies, a book co-authored with Paul Neurath titled "An Indian Experiment in Radio Farm Forums" (published by UNESCO), a paper prepared for UNESCO titled "Television for Citizenship" and a book titled "Adult Education for Farmers in a Developing Society" (published by IAEA in 1972) are still referred by research scholars for their work.

Shri JC Mathur is survived by three sons and a daughter. Sons have retired from civil services, two from IAS and one from IRS. Daughter, who is married has been a prominent Odissi dancer.

The Indian Adult Education Association is proud of Shri JC Mathur, a distinguished Life Member and Chairman of the Editorial Board of Indian Journal of Adult Education and fondly remembers his great contribution to the development of adult education in this country.

Dr. V.Mohankumar

Relevance of Teaching Methods of
Gijubhai in Present Education System

Diksha Bhartiya
Meena Sirola

Gijubhai Badekha was a teacher and educationist with an experimenter's scientific rigor. He is person full of spark and faith in himself to do and demonstrate something new in the field of child development. With his faith, spark and scientific rigor Gijubhai laid the foundation of Primary education in India and worked hard to create a system of child education suitable to Indian environment. According to Gijubhai education seeks to nourish the good qualities in man and draw out the best in every individual. Education seeks to develop the innate inner capacities of man. He develops some understanding about the deeper things in life, the complex human relations, and the cause and effect relationship and so on. It is what remains when we have forgotten all that we have been taught. Education does not mean teaching people to know what they do not know; it means teaching them to behave as they do not behave. It is a bi-polar process in which one personality acts upon another in order to modify the development of that other. The only purpose of education is to teach a student how to live his life by developing his mind and equipping him to deal with reality and its greatest aim is not knowledge, but action.

While educating a child three main questions arise in the field of education and they are - What to teach, Why to teach and How to teach. A stable education is based on the solution of these questions. According to Gijubhai method of teaching depends upon two factors namely subjects to be taught and the age of the pupil. Each subject and every age demanded new methods of teaching. Every subject should be developed with suitable ways requiring suitable line of development.

Educating a child according to age-old traditions, beliefs and methods is sheer waste of time and energy, because traditional methods of teaching that are rigid, static and lifeless. Therefore Gijubhai rejected such methods as they were bookish, theoretical and not close to nature. Nevertheless, Gijubhai recommended different methods of teaching basing upon his philosophical thoughts and beliefs. He advocated flexible, dynamic and interesting methods according to needs and interests of children.

In order to improve the present education system Gijubhai deeply studied the subject how to provide a good education to children. Based on this concept he has given some commendable thoughts on what should be the appropriate teaching methods, which the researcher has studied to fulfil the objectives of research.

Objectives

1.   To explore different teaching methods suggested by Gijubhai.

2.   To study the relevance of teaching methods of Gijubhai in present education system.

Research Methodology

Based on the objectives and nature of the problem, the researcher has concluded that the present study is philosophical study, which is a type of Qualitative Research. In the field of education Philosophical Research is a method that is used to deeply study about great thinkers, philosophers and educationist. The structure of philosophical research is mainly descriptive and the main objective of such a research is to analysis and reviews the same in some or the other context. Qualitative research uses non-quantitative methods to describe what is. Qualitative research uses systematic procedure to discover non-quantifiable relationships between existing variables.

In Qualitative research mostly content analysis is done, i.e. the analysis is concerned with the explanation of the status of some phenomenon at a particular time or its development over a period. It serves a useful purpose in adding knowledge to fields of inquiry and in explaining certain social events. While doing content analyses not only the authenticity of the document is important, but also the validity of its content is crucial. It is the researcher's obligation to establish the trustworthiness of the data drawn from documentary sources.

The present study was conducted in following steps:

-   The researcher first identified the selected books from the deep literature of Gijubhai.

-   After selection of the books as sample a thorough study of the same was done by the researcher.

-   After thorough study of the selected books, content analysis of the same was done to identify different teaching methods suggested by Gijubhai.

-   Relevance of the categorized educational thoughts was analyzed and conclusions were drawn.

To explore Different Teaching Methods Suggested by Gijubhai

Gijubhai had suggested many new teaching methods different from the conventional ones through his writing but has also written some books specifically on teaching methods i.e. 'Prathmik Shala Mein Shiksha Padattiyan' and '*Divaswapna'* etc.

a) One Teacher Method

The first and foremost change Gijubhai wanted was not in how the teachers teach but who teaches the students. Gijubhai by one teacher meant that same teacher should teach the class for entire primary section i.e. from first to fifth. Gijubhai was deeply concerned with the problem junior kids were facing due to many teachers teaching them and students upgrade from junior to senior classes, but the junior teacher only knows the strength and qualities of the students he/she taught. According to Gijubhai the tragedy is the one who don't know about the strength and weakness of the students has the responsibility of all round development of those students. Means childhood is an age of development and if many teachers will contribute in it, inspite of all round development it will be spoiled because one or two experts only can make a beautiful creation or masterpiece. i.e. if teachers will change every year or say in every period then the process of development will also change its path according to the new teacher and the child running to that path will not be able to reach anywhere.

b) Play-way Method

According to Gijubhai the initial stage of learning is very crucial for the development of children, but the issue is that the initial stage of learning is often over looked equally by schools and teachers. More stress is given on the cognitive development of the child rather than its social-emotional development. Gijubhai through his book 'Divaswapna' said that if a child's social and emotional development is not done properly it will not be able to exercise the cognitive components in life. This is so because whatever the child is learning is not interesting and also does not like the content being taught and hence, the child ends-up in mugging the lessons. Therefore, according to Gijubhai to develop an interest of students among studies 'Play-way' method should be introduced as it helps in improving the motor skills, power of imagination and creativity among children. He further said that for better learning some points need to be fulfilled such as - free environment conducive to learning, learning should not be restricted to books but to be related to life and the method of learning should suit the needs and requirements of the learner. All the three points are satisfied by only one method of teaching i.e. play-way as it makes learning easy, enables the children to get equal chance to participate, focuses not only on knowledge but also on skills and gives freedom of expression.

c) Story Method

Gijubhai through his experiment 'Divaswapna' proved that telling stories do not works as means of relaxing children from the hectic day but can do wonders if introduced in the field of academics. Many subjects like history, geography, etc. can be taught through stories, all a teacher need to do is that once he/she needs to go through the content and note down the important points. After noting down the important points teacher needs to build an imaginative story around the points using his/her creativity in such a manner that the essential details of the history are not hampered and students also enjoy the story. According to Gijubhai story

telling has laid guidelines, which a teacher should follow while teaching through story telling method. Teachers should carefully select the story according to age group of the students. While designing the story around the imaginative character teachers need to be highly imaginative so that the interest and the suspense of the story keep the students binding.

d) Synthetic and Analytical Method

Gijubhai through his experiment '*Divaswapna*' came out with a set of new methods of teaching which he named as 'Synthetic and Analytical Method'. Synthetic method is the one in which first the sub-parts of topic are taught or introduced in the class and slowly while getting the knowledge of sub-topics move towards the whole topic at the end. However, analytical method is just opposite of the synthetic method i.e. in analytical method the students are first introduced to the whole topic and then gradually are made acquainted with the sub-topics.

According to Gijubhai while teaching English language use of analytical method should be done because the pronunciation and writing of the words are different in English, in the case of Hindi the pronunciation and the writing are same and bring no confusion in the mind of students, therefore for Hindi synthetic method can be used. Gijubhai suggested to use analytical method for teaching music i.e. first students should be allowed to listen music of different 'chants' and once the students are able to identify the chants they should be introduced to the 'sargam'. While teaching geography the teacher can make use of both the methods and for Mathematics only synthetic method is used which is the most appropriate one.

e) Deductive and Inductive Method

Gijubhai after his research on teaching methods concluded that 'Inductive' as well as 'Deductive' method of teaching are present in the Indian education system since ancient times. According to Gijubhai deductive method is one where students are first introduced with the theory or the principle of the subject and then with the help of live examples or old examples, the theory is proved i.e. by constantly repeating examples the theory is proved. In deductive method, the theory is made to understand and its results are shown with the help of intelligence and discretion and by giving relevant arguments i.e. whatever is required to be proved is proved by taking theory into consideration with the help of relevant arguments. Inductive method is just opposite of deductive method, in this method, first different examples are studied and based on those examples a theory is established. All the science researches are done with the help of this method i.e. after studying different cases of malaria it is concluded that malaria is a type of fever caused due to biting of mosquitoes. New discoveries in science based on this method, with the help of different example of experiments these new discoveries are proved, and new theories are formed or arrived at.

While comparing both the methods Gijubhai concluded that in deductive method, one has to move ahead towards knowledge while believing in the theory

lay down by others but in inductive method one has to search the truth with his/her intelligence and decision is taken by experiencing the facts. Inductive method is based on intelligence, mind, heart and experience and therefore is virtual and implied in nature but to its opposite in deductive method knowledge is intelligence and logic based. Gijubhai knew that today's era is based on science and according to him to have a scientific viewpoint is very essential for child's development. Therefore, from starting students should be taught with inductive method.

To Study the Relevance of Teaching Methods of Gijubhai in Present Education System

Gijubhai conducted an experiment in Bhavnagar on Child-Teaching which were according to the environment of that era but are also relevant in the present time as we need such teachers who have a zeal to abolish the old methods of teachings. His thoughts have relevance in the present education system as Dakshinamurti Balmandir assisted by Gijubhai still follows the principles laid down by him and was able to achieve the motives of education and able to maintain the same today as well.

The most important benefit of 'one teacher method' introduced by Gijubhai is that as the teacher will get to spend more and more time with the kids he/she will be able to identify their strengths and weaknesses and will be able to give better nutrition. Moreover, as the students will get in touch with one teacher on continuous basis their confidence in the teacher will increase and they will be able to share every good and bad thing about them to him/her. This will bridge the gap prevailing from years among teachers and students and will tie them in the bond of love, affection and trust. According to Gijubhai one teacher will be teaching junior kids from 1st to 5th class he/she will actually be able to judge the curriculum well, and will make amendments accordingly. The teacher will be in a better position to judge his/her own teaching methods and change them as and when required. One teacher associated with the kids will know what they have learnt and how they would have learnt in the previous class. This will enable the teacher to revise the contents of teaching accordingly.

Gijubhai defined 'Play' as an activity done for fun or enjoyment without thinking about the result, but finally playing results in maximum amount of learning because play-way method is the most flexible and revolves around the interest and aptitude of children due to which they understand their needs and goals better while playing. Moreover, play-way method embarks the students on the way of self-discipline as it consists of pleasure and satisfaction. Learning through games make the environment very relaxed, which makes learning interesting and thus helps in better retention of knowledge. Games provide opportunity for complete freedom of expression thus helps students in connecting with their teachers easily.

Every student remembers all the facts and details of 'Ramayan or Mahabharta' because they were and are being told or taught in the form of stories. Women remember all the religious do's and don'ts as were also told to them by

their elders through stories i.e. a beautiful story works as direct introduction of history. As per Gijubhai stories not only help in teaching but also help in developing interest of students among different activities like sports, music, drawing, art and craft etc. by telling the stories of achievers in the same field. Music is now-a-days taught with the use of synthetic method i.e. first the alphabets of music such as 'Sa Re Ga Ma Pa Dha Ni Sa' are taught which makes the learning of music difficult and children lose interest in the same. Therefore as suggested by Gijubhai music should be taught in analytical method.

In primary schools where education imparted is not based on the minute thoughts of students rather it is based on the developed logic their deductive method is used to save time and energy. Those who believe that knowledge is a power are more inclined to use deductive method, but Gijubhai reconsidered the fact that knowledge is not a power rather strength to gain knowledge is a power. Moreover, this statement of Gijubhai is proved by inductive method as it not only provides the strength to gain knowledge but bring students on the road to gain knowledge.

Conclusion

While going through the literature of Gijubhai the researcher has explored the different teaching methods advocated by Gijubhai and has also tried to find their relevance in the present state of education in India. The researcher came to the conclusion that the above mentioned educational thoughts of Gijubhai are relevant in the present state of education in India, as Dakshinamurti Balmandir assisted by Gijubhai still follows the principles laid by him and is able to achieve the motives of education and also is able to maintain the same today as well.

The content to be delivered and the teaching methods should be according to the interest of the child so that the receptivity increases and in turn leaning also enhances. This can be made possible only by different teaching methods introduced by Gijubhai which was supported by Yashpal Committee also by stating that "learning should be with pleasure." Gijubhai believes that if teaching-learning process is conducted in the similar way as done by him in his experiment, moral learning would develop in the student automatically and there will be no need of moral education as a special subject.

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Role of Universities in Promoting Entrepreneurship with Special focus on Women

Asha Ramagonda Patil

Entrepreneurship is a crucial factor in the development of a nation. Culture is an acknowledged factor, which contributes to building an entrepreneurial society. It is an important determinant of career preferences and helps shape attitudes to risk-taking and resultant rewards. Developing an entrepreneurial culture and fostering entrepreneurial attitudes and values is high on the government agenda. Education and training (including lifelong training) in entrepreneurship and creativity are the preferred instruments for encouraging entrepreneurial behaviour in societies, and evidence suggests that such programmes can have an impact on entrepreneurial activity and enterprise performance (OECD, 2014). Entrepreneurship not only generates employment opportunities, but also contributes to regional development, especially the development of backwards areas. It utilizes local resources and skills.

Globally, it has been recognized that women's empowerment contributes to overall economic and social development of a nation. This has resulted in changing the approaches- from welfare to development. Entrepreneurship is one of the strategies to empower women. This will definitely help to resolve various gender issues. Various studies have shown that it has also helped in reducing poverty to some extent. In many countries, women entrepreneurs have created a great impact on national economy.

Concept and meaning of Entrepreneurs

Entrepreneurship is all about leadership risks and rewards. It needs positive attitude, unlimited energy and contagious enthusiasm to make things happen. Entrepreneurship is a rare commodity. It demands a great deal of discipline and determination to succeed against multiple odds. A new business venture normally begins with just an idea based on a perceived need for a product or a service. The idea then requires incubation and nurturing to formulate a business plan. To implement a business plan networking of a variety of financial and human resources is required. Hard work, perseverance, people-skills and understanding of the customer's requirements creates a new business enterprise.

An entrepreneur is a person or a group of persons, who are self-reliant, have capability for innovations, are ready to take risks and execute their ideas to complete the task/s effectively.

Definitions of Women Entrepreneurship

The Organization for Economic Cooperation and Development (OECD) defines entrepreneurship as a phenomenon associated with entrepreneurial activity as the enterprising human action in pursuit of the generation of value,

through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.

Government of India has defined women entrepreneurship as ' an enterprise owned and controlled by women and having a minimum financial of 51 percent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women' (Hariharaputhiran, 2014).

Globalization has opened up unprecedented opportunities and new avenues for entrepreneurial activities. This has given opportunity to many women to show their talents and business traits. They have crossed the world of 'job seekers' to 'job employers/self-employed/entrepreneurs'. This means that these women have attained more economic independence, which has improved their socio-economic, psychological and cultural status. They have also contributed to the economic development of the nation.

Qualities/traits of a good Entrepreneur

Entrepreneurs have special skills and attitude. They possess multiple skills with a unique ability to integrate these skills. They are always open to new ideas, willing to learn from mistakes, not afraid to fail and change priorities and plans to meet a dynamic business environment. They exhibit drive, dedication, responsibility, initiative, vision and energy in their dealings (Pitroda, 1998; Parekh, Vyas & Sen, 2003). Various studies conducted all over the world show that women entrepreneurs have more power of endurance than men in facing crises and setbacks in business.

Entrepreneurship requires hard work, networking and planning. It also requires a one-track mind. Entrepreneurs are practical and strong-headed. They are determined people with strong will to achieve their goal. They have capacity to absorb knowledge from all sources. They are multifaceted personality with problem solving skills and can handle diverse problems at the same time. They are good at analysing and interpreting situations. They value time. Thus they are ready to take risks and willing to pay the price for making mistakes. They never take blind risks. It is always a calculated risk. Of course, they learn from their mistakes. To become a successful entrepreneur, one needs to understand the tricks of the trade, which are based on in-depth knowledge of business.

A good entrepreneur never compromises on quality.

Women as Entrepreneurs

Initially women entrepreneurs were restricted to kitchen products: 3P's-Pickle, Powder and Papad; jams, jelly and beauty products as well. In twenty first century this picture is changing due to education and awareness about their rights. Women entrepreneurs have been making a significant impact in all the segments of the economy in India, Canada, Great Britain, Germany, Australia and the United States. The areas chosen by women for entrepreneurship are retail trade,

restaurants and hotels, education, cultural, cleaning, insurance and manufacturing. Women have entered in the field of interior decoration, interior designing, fashion designing, export, publishing, garment manufacturing, handicrafts, leather industry, etc. Now, women are seen in other enterprises such as energy, electronics and engineering (3E's). They are adapting themselves to the challenges of market. They have broken the glass ceiling. They are proving themselves by using their capacities and abilities to the optimum. Thus, they are contributing to the family, society and country as well.

Thus, the spectrum of women entrepreneurs ranges from own business to micro-enterprises-often small home-based businesses. Self employment of these women has changed their position from being job seekers to job givers.

Entrepreneurship plays pivotal role in economic development of any country. It also creates new job opportunities for skilled people. It helps to use human resources in a proper manner. Thus, it helps to reduce poverty.

Rural India Scenario

Indian women are confined within four walls. The perception of society towards women's main role as a familial one still continues in the twenty first century. The socialization process does not allow women to acquire skills and traits required to compete with men in market place. Women entrepreneurs, who were confined to metropolis and urban areas, are playing key roles in economic development. Though the Government of India has launched various entrepreneurial development programmes for women, it has not reached to all the rural women.

In 21st century, situation is changing, though slowly, but steadily.

Rural women are usually confined within a limited space because of the prevailing social and cultural structures and norms. As far as professions are concerned, women are seen in education, nursing, offices (mostly at lower positions) and a few in medicine and engineering areas. Woman in business is a rare example in rural areas. The most important constraints in this area are lack of knowledge, literacy and proper attitude. Some women, with established family business background, have entered in the market. But, a lay woman, especially in the rural parts of India, faces fourfold disadvantages of:

- Being female (in rural, patriarchal society)
- Being economically backwards (poor)
- Being illiterate/semi-literate; and
- Facing caste barriers (Wadhera and Koreth, 2012).

The scope for women's growth in entrepreneurship depends on their status and role in the society. This refers to political situations, institutional set up, family background and support and market forces.

Religion, culture, attitude of society and psychological factors play an important role in the life of women entrepreneurs. Availability of capital to women is another factor that mars their entry in the market. Though it is true that women play a positive and constructive role in the development of nation, but market hardly provides conducive environment for women entrepreneurs. Women face many hurdles to prove their mettle as entrepreneurs. They have to break the shackles of traditional roles while accepting the challenges in this competitive and male dominated area.

Need of Women Entrepreneurs

Globalization has opened many avenues for business. Many multinational companies are investing their capital in various industries. Industrial investment has increased within the country as well as from outside the country. Trade is open universally. This has opened opportunities for women to participate in economic development of self and the country. Women's participation will help to utilize human resources in a better manner and also improve women's status in the society. In other words, this will lead towards gender equality. Women's economic contribution is also an important indicator in deciding the status of the country. The human development index indicates it. Entrepreneurship will help women to become empowered, which in-turn, will improve their status in family, society as well as in the market. This will also help to raise the standard of living and improve the quality of life.

Government's efforts for developing Women's Entrepreneurship

Today more attention is paid towards promoting women entrepreneurship all over the world. They are encouraged to engage in self-employment. Government of India has started 'Make in India', 'Start-ups India' to promote entrepreneurship amongst youngsters. National Innovation Council (2013) has established 'Inclusive Innovation Fund'. It has helped as a catalyst in the development of an entrepreneurial ecosystem. It supports innovation geared towards marginalized groups in society.

Various research studies have shown that women entrepreneurs contribute to the economic development of family as well as to their own empowerment. In other words, they contribute to the Millennium Development Goals (MDGs). Thus throughout the world, Government and other financial agencies have been promoting women entrepreneurship. They offer various schemes, subsidies, incentives and promotional measures. Indian government, too, has offered various schemes to promote women enterprisers. Following are some of the important schemes to promote women entrepreneurs:

1. Prime Minister's Rojgar Yojana (PMRY)
2. Credit Guarantee Fund scheme for Micro and Small Enterprise
3. Trade Related Entrepreneurship Assistance and Development (TREAD)
4. Mahila Coir Yojana

5. Support to Training and Employment Programme for Women (STEP)
6. Swayam Siddha
7. Entrepreneurial Development programme (EDPs)
8. Prime Minister's Employment Generation Programme and Women
9. National Banks for Agriculture and Rural Development's Schemes
10. Management Development programmes
11. Women's Development Corporations (WDCs)
12. Assistance to Rural Women in Non-Farm Development (ARWIND) schemes
13. Micro & Small Enterprises Cluster Development Programmes (MSE-CDP)

In addition to this, various state government schemes are also contributing for the encouragement of women entrepreneurs. For example, Kerala Government's 'Women Industries Programme', 'Stree Shakti Project' by Delhi Government, 'Incentives to Women Entrepreneurs Scheme' by Goa Government (2008) and so on. Similarly, in North East too, women entrepreneurship is rising up. In addition to government and other financial institutions' effort to promote women entrepreneurs, there are various NGOs and associations, which also support/contribute in promotion of women entrepreneurs.

The new Industrial Policy of the Government of India is encouraging women entrepreneurship.

Hurdles faced by Women in becoming Entrepreneurs

Indian society assumes that women in general are frail and indecisive. Women have conventional family responsibilities. Even educated and skilled women are confined within the four walls. They lead a very protective life. Hence, their ability to bear financial risks is low.

Women constitute roughly half of the population. 2/3 of the world's work is done by its women. The paradox is that not even 10% of the total women have entered into entrepreneurship. Sometimes facilities are available, but social attitude restricts them to enter into this field. To reduce inequality, one should encourage women to become entrepreneurs. For this, one needs to understand the hurdles faced by women entrepreneurs in:

-   Preparation of a viable project proposal
-   Dealing with bureaucrat patriarchal humiliating attitude
-   Getting finances/loan due to absence of any property on their name
-   Dealing with suppliers of raw material (male dominated market/ Male chauvinism)
-   Unscrupulous middlemen hoodwink pocketing the lion's share of the profit (Saritha, 2008)
-   Social pressure
-   Mobility

- Non-availability of family cooperation
- Lack of training facilities in entrepreneurship
- Lack of information regarding technology, schemes, concessions, alternative markets etc.
- Lack of awareness about various financial schemes
- Getting a prime location
- Handling labour (male dominated) problems
- Lack of role models

Challenges faced by Entrepreneurs

Globalization has reached in every walk of our life. It has created many opportunities as well as many challenges. Benefits of the global economy have been unevenly distributed. In the globalized world, market is volatile, though it is more open. Entrepreneurs may face following challenges:

- The needs of the market are in continuous flux. Hence the consistent uncertainty badly affects the entrepreneurship.

- Explosion of information and fast changing technology affects the market on a daily basis. Thus it is imperative for an entrepreneur to update herself regularly in all the areas.

- Consumer needs are ever changing. So, one is expected to do need assessment at regular intervals.

- Job hopping for better prospects is the characteristics of the today's youth. This affects their integrity/loyalty towards a job. This results in un-stability and availability of talent. This affects the business altogether.

- Contractual nature of work, with its policy of work to be done anywhere, anytime also affects production. The quality also suffers.

- They have to face tough competitions till they establish themselves as a brand. It can also be deterrent for enterprisers.

- Growth of Mall Culture promotes established brands and blocks the entry of new entrepreneurs.

- Power Failure/disruptive power, especially in rural areas affect production and overall business.

- Getting viable and sustainable credit is still a major challenge for women enterprisers. This also affects purchase of new technology and equipment to improve their products.

- Lack of support system, especially in the area of training and technical assistance, restricts the up gradation of their skills, thus affecting their output. Another reason is that predominantly staffed by men prevent women to join these training (Patil, 2017).

Recommendations to increase Women Entrepreneurship

Special efforts should be taken by the family, society and the government to motivate more number of women to become entrepreneurs. Women's confidence should be boosted. Since childhood they should be allowed and encouraged to take their own decisions. Their mobility should be encouraged. Support of family, especially in the area of child rearing, leave arrangements and financial help can work wonders for women entrepreneurs.

Each enterprise is unique in itself. It operates in its own environment. Hence it is necessary to understand the environment in which it functions. One needs to understand human resources required for a particular enterprise, its policies and regulations, related labour laws, etc. One has to have a thorough knowledge of the characteristics, the setting up an enterprise, regional and sectoral policies, and trade policies, fiscal and monetary policies. It is also important to know about employment policies, especially related to wages, working conditions and technological aspects of enterprise. One has to understand the registration process, acquiring permits to run a micro and small enterprise and its nitty-gritty.

Following are the recommendations to encourage women to become enterprisers:

More facilities for training

- Training centres for women entrepreneurs should be started at each district. This training should provide them opportunities to explore their identity i.e. understanding their strengths and weaknesses. Training should emphasise on self awareness and assertiveness.

- Training should help them to overcome the fear of failure, fear of rejection, low risk-taking ability and lack of resilience.

- Through thorough trainings, women should develop professional competencies in various areas such as management, marketing, finance, planning, accounts, etc. They should also develop leadership qualities.

Increase role of educational institutions

- Girls at higher secondary level itself should be encouraged to go for vocational trainings and/or join polytechnics. Parents should recognize the potential of their daughter/s and encourage them to start an enterprise. It should be looked as a profession like any other.

- Vocational education institutions and polytechnics should have linkages with the industry. This will help students, especially girls, to get exposure to the various aspects of production.

- Entrepreneurship subject should be introduced at the under graduate and post graduate levels in all streams; with special emphasis on women

entrepreneurship.

Initiative for women within

- Women should attend International, National, State, regional and Local trade fairs, Industrial exhibitions, seminars and conferences. They should interact with as many as people, especially women entrepreneurs, and read books related to the subject.

- Women, who are in enterprises, should keep themselves updated. They should increase their capacities and abilities to handle the latest technology. For this, they can attend various crash courses/refresher courses.

- Women should take the help of Counsellors and mentors in dealing with problems and loss in business especially at the initial stage.

- Women should take special guidance to understand various laws, financial aspects, challenges of selected business, etc.

Encouragement from government and financial institutions

- Government and banks together should make simple and easy procedures to get loans. This will encourage more women to start their business, especially for middle/lower middle class women. They should provide more working capital to women.

- Government, banks and other financial institutions should continuously organize awareness programmes on various credit facilities, financial incentives and subsidies.

- Banks and other financial institutions should open a separate special cell to provide easy finance to women who want to start an enterprise and/or who have already started enterprise and want to expand it.

- Government should encourage and assist women entrepreneurs to form/ establish a cooperative, where they can sell their products at reasonable rates.

- Government intervention should be there in the chain of suppliers of raw materials. Raw material should be made available to women enterprisers on a priority basis, if possible, with subsidized rates.

- Creation of women industrial estates will help women to overcome hurdles in her business.

- Like other developed countries, business incubators should be developed in large numbers in the proximity of/to the women entrepreneurs. It should provide contacts with bankers, government officials, venture capitalists

and also provides technology assistance. In India, such incubators can be established in metropolis and if possible, at district place. (Raheem and Jamal, 2008).

- Entrepreneurial cells should be established at local level such as school premises/colleges, public libraries, study centres, etc. They should impart trainings; update information on various sources to get raw material, marketing and credit facilities available.

Create better awareness

- Data and details of successful women entrepreneurs should be made available. This will provide guidance to others.

- There should be a continuous attempt to inspire, encourage, motivate and co-operate women entrepreneurs (Hariharaputhiran, 2014). One can make extensive use of media (print, electronic and social media) to create awareness amongst people, especially women, about various government schemes to avail loans.

Role of Universities in promoting Entrepreneurship

India declared National Policy on Skill Development and Entrepreneurship (MSDE) in 2015. This has emphasised skilling India. The role of universities in skill India has increased. Introducing courses in entrepreneurship and establishing incubators are the two important areas, where universities can contribute.

India has around 400 million youth who are just going to kick start their career. Hence, it is very necessary to provide them guidance to take up entrepreneurship as their career. Many of them are in a dilemma about their career. Globalized world has created knowledge based economy. This has now focused on entrepreneurship. Education plays an important role in developing and fostering the mind-set of youth. To fulfil the demands of markets, universities can start short-term, diploma and degree courses in entrepreneurship. It can be offered as a compulsory or under Choice Based Credit System (CBCS). Such courses will help to develop skills and attitudes of younger generation to take up entrepreneurship as a career.

Traditionally youth is exposed to limited areas. Nurturing the spirit of entrepreneurship at an early stage of life will change their world. The courses on entrepreneurship should focus on communication skills, problem solving skills, goal setting skills and negotiation skills. It should stimulate innovative thinking skills. Leadership qualities should be developed during the course period. Skills and capacities of enterpriser could be developed through systematic and planned training. These students should be given hands-on experience through internship and/or apprenticeship. The curriculum should focus on three M's namely money, market and management.

Entrepreneurship course should include both- theoretical as well as practical components. Innovative and creative teaching methods should be used. Universities can develop case studies of successful enterprisers. They should explain how they started their enterprise, what barriers did they face initially and how did they overcome them. Such case studies will encourage students and will provide them motivation to go ahead. By using activity based teaching methods, students can learn while doing the activity. Students should be given more opportunity to interact with various people- from industry, raw material suppliers, finance providing institutions and consumers as well. For this universities can organize seminars, conferences, workshops, fairs, exhibitions and other events, where students could get opportunity to interact with people. Throughout the course, students should be given full scope to implement their innovative ideas and nurture their creativity. For this, universities have to establish networking with industry experts. They can mentor the students as well. Networking will also help to share the infrastructure. Internship/placement/apprenticeship should be part of curriculum. This will give an exposure to students to real work life.

Universities can establish incubators in the campus itself. Incubation is a new concept in India. An incubator includes various facilities such as training, mentoring, and sharing infrastructure under one roof. It also includes science laboratories, computer facilities, classrooms, technicians, reference reading material and so on. This facilitates learning and boosts confidence of students. Such facilities help students to launch their new business.

National Science and Technology Entrepreneurship Development Board has started incubators in India. Till 2016, India has more than 65 Technology Business incubators, 15 Science and Technology Entrepreneurship Parks, 38 Entrepreneurship Development Cells and 35 Innovation and Entrepreneurship Development Centres (nstedb.com).

Challenges in front of Universities

Bringing attitudinal change- from job seekers to job providers is a great challenge for all the universities. All these years society in general and students in particular believe that education is for seeking job. Jobs give fixed monthly income. Thus, very few students consider entrepreneurship as a potential career. Now, universities have a big challenge to convince the students and their parents to consider entrepreneurship as a career. Currently universities do not have sufficient number of specialized teachers, who can handle the entrepreneurship course. They have to either train the current teachers or hire experts from outside. This is not possible in a short-period.

Areas where the universities can contribute:

Introducing entrepreneurship in curriculum

- Universities should introduce a paper in entrepreneurship at undergraduate and post-graduate level and teach essential business skills.

- Universities can introduce diploma and/or certificate course in entrepreneurship. The students completing entrepreneurship course should be able to prepare a sound business plan and launch their own small businesses.

- Universities can start short term courses for skill development (soft skills) and other areas such as taxation, judiciary and legal system, licensing procedures and so on. There should not be any condition for entry level. These courses should be based on local and regional market demands.

- Universities should involve industry people in curriculum development of all the courses related to entrepreneurship. Industry/ business persons should also be involved in teaching as well. Sharing of their personal experiences will enrich the knowledge of students.

Creation of Favourable environment

- Universities can create a favourable entrepreneurship environment at the campus by organizing fairs/exhibitions and 'Entrepreneurship Week'. Such events will give students an opportunity to know the latest happenings, trends in the market. Students should be encouraged to put their projects in such events. This will give them an opportunity to interact with various people. It will also help to promote networking and collaboration.

- Universities can give an opportunity to students to put their business plans in exhibitions. The most promising ideas could be awarded a prize.

Internship/apprenticeship

- Universities should tie-up with various industries for apprenticeship of students. After completion of theoretical aspects, all students should be given internship or apprenticeship. This helps them to learn further, improve and gain experience under the trained personnel from the industry. This real life work experience boosts the confidence of youth and helps to overcome gaps in academic learning. This also gives them exposure to handle latest tools and technologies.

Fund

- Like development fund, universities can start capital fund that could provide start-up investments.

- To support students at initial phase of business, universities can adopt a variety of approaches to raise funds. This includes donations from established industries, private donors. For this purpose, they can use Internet and other marketing channels, celebrity sponsorship, and philanthropic joint ventures.

Business Incubators

- Universities can start building business incubators in the campus itself to

support the start-up firms. This facility will help the beginners of business. It will provide assistance in the form of infrastructure, business advice and services, access to investors and markets, and mentoring.

Conducting survey and research

- Every year, universities can conduct a regional survey of at least 2000 people within its adult population (Global Entrepreneurship Monitor (GEM) approach). It is a survey of attitudes towards entrepreneurship in the general population. They can collect data on whether youngsters have their own business or run their family business. This data will give information about entrepreneurial activities at various stages of the entrepreneurial process UN Conference, 2015). Such studies will help to understand different trends in business. This information will also help the universities in revising their curriculum. Such survey studies also help to understand trends in local/ district/regional business.

- Conduct a survey of established business owners. Established business owners are entrepreneurs who have paid salaries and wages to their employees for more than 42 months. Universities should prepare case studies of established entrepreneurs to understand the problems faced by them at different stages and the strategies to overcome them. These will guide/motivate/inspire the future enterprisers.

- Classify data based on entrepreneurial motivation (whether business owners are either necessity-driven or opportunity-driven, family-based entrepreneurs and social entrepreneurship). Further data can be classified based on product novelty, intensity of competition, employment and expansion plans, and use of technology, socioeconomic characteristics of populations, their subjective perceptions and expectations about the entrepreneurial environment. Such research will give them information on best practice in the entrepreneurship and enterprise development field.

- Universities can start a consultation and research centre in entrepreneurship and co-operatives. This can help to generate income to the university.

- Universities can take diagnostic studies of sick units of small scale industry. After thorough study of obstacles faced by them, it can recommend measures to overcome these obstacles.

Collaboration & networking

- Universities can collaborate with individuals and organisations working in entrepreneurship and share ideas, experience and expertise with them.

- Universities can start information and advisory centre. It should provide first hand information to business starters and entrepreneurs on various aspects of business. The centre should act as a mentor and provide one to one free counselling.

- University may select students, who are willing to take risks to start a businesses and blaze new paths to success.

- Like Spring Singapore, universities can start Information centres, where one can see calendar of events, and a link to a library of archived feature stories, articles, reports, speeches and press releases. It includes useful links to statistical sources, market research services and a deal flow portal, which connects businesses to sources of funds such as financial institutions, venture capitalists and investors.

- Organize conferences focusing on different aspects of growing small businesses.

- Universities can establish linkage with various Indian Institutions promoting Entrepreneurship. They include Associated Chamber of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII), The Council of Scientific & Industrial Research (CSIR), Entrepreneurship Development Institute of India (EDII), Export Promotion Councils (EPC), Federation of Indian Chambers of Commerce and Industry (FICCI), Federation of Indian Exports Organisation (FIEO), Indian Institute of Entrepreneurship (IIE), National Bank for Agricultural and Rural Development (NABARD), KVIC, Small Industries Development Bank of India (SIDBI)

- Universities can identify training needs and offer training programmers to Government and non-Government organizations engaged in promoting and supporting entrepreneurship. For this, they can take the help of industry experts.

- Universities could establish linkages with malls, export suppliers, wholesalers, etc. and encourage students to sale their products.

Documentation

- Universities can document and disseminate information needed for policy formulation and implementation related to self-employment.

- Universities can prepare and publish literature related to entrepreneurship and industrial development.

- Universities can organize seminars, workshops and conferences for providing a forum for interaction and exchange of views by various agencies and entrepreneurs.

Conclusion

The growth of women entrepreneurs in India is increasing, though at low pace. The growth is still at the nascent stage. It will significantly contribute to the socio-economic development of our nation. Emergence of large number of women entrepreneurs will definitely strengthen the industrial base. It will generate employment opportunities leading to balanced growth of the nation. Today, a large

number of women are entering in the field of entrepreneurship-in small scale industry. But unfortunately only a small section of women are able to take benefit of various government schemes. There is an urgent need to create awareness, especially among women about entrepreneurship. Women should be encouraged to enter business rather than being in paid employment. Micro-enterprise provides a platform to rural women to develop their entrepreneurial skills. It has successfully improved social status of women at many places, resulting in social and economic empowerment of rural women.

Universities have significant role to play in the development of youth, especially for girls as enterprisers, as they are breeding pools. It should promote interdisciplinary approach and introduce entrepreneurship component in all faculties. It should give more opportunities to students to express their ideas and encourage their creativity, enthusiasm and innovations. Such strategies will attract more students to opt for entrepreneurship course. This will reduce imbalance between rural and urban development. It will also help in the development of backward and regional areas, which will subsequently result in the overall national development.

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Peer-led Education for Health Promotion:
A Sustainable Approach to Adult Education

Manali Pandit and Aarti Nagarkar

Universities prepare students for professional work and facilitate contribution to the scientific and technological growth of a nation. One of the mandate is teaching, research and extension that is transferring knowledge and skill for the benefit of larger society. It is expected that the universities and the educational institutes become sensitive to the learning needs of the surrounding communities and respond through relevant learning programmes and extension tools. Extension education is a rigorous process. It requires motivation, scientific knowledge, innovative approach to identify target group, assess their needs, formulate educational programmes, choose innovative instructional methodologies, low-cost management strategies and ongoing feedback mechanisms (Vasantha K 2001). One of the extension system's areas of expertise is non-formal education. Women's role in the non formal education is very vital and acknowledged world over.

There is currently strong interest in the transfer of health knowledge to communities by way of community participation. A large body of research on the intervention activities and innovative approaches to improve health exist (Iryani B 2011, Aaro L 2014).Participatory peer educational approaches have increased in both popularity and practice among health promoters in both rich and poor countries; they have met with varying degrees of success. Role of extension education in health education is well documented (Gillis D, English L 2001). Peer education remains effective in the case of reproductive and sexual health due to the fact of sharing same background, interest and use of language that facilitate knowledge transfer (Tolli 2012). It is seen through research that peer educators are often familiar with participant's knowledge gaps and have knack for motivating learners by using familiar styles, including the appropriate jargon (Grudens-Schuck N 2003).

Studies have shown that peer education is a successful approach in changing knowledge and behavior (Barua 2001; Malleshappa 2011; Farih 2014). It not only helps in community capacity building but also provides sustainable ways of delivering knowledge. Women are considered as a key resource in maintaining health of the family. As women's roles in public spaces increase, they become active and become advocates for family and community's welfare. Many ordinary women in the communities are motivated but lack professional knowledge, skills and direction in seeking health related information and assist their families and other women in the vicinity. It makes sense for Extension education to identify such motivated women who may play a pivotal role in transforming knowledge

and empowering communities. Therefore, this research paper examines how a university extension programme became involved in promotion of reproductive health knowledge among urban women.

Current research paper is a process documentation of experiences and methods used for peer education. It is based on the experiences of a research which aims at developing the peer educators at community level for health promotion and to study the process, methods, techniques, strategies and significance of peer educators training as a tool for community capacity building. The purpose behind this research is to learn implementation experience and with the help of it modify strategy and ultimately, policy.

Methodology
Study area

The present study is ongoing in an urban slum located approximately eight kilometers from the University in the Pimpri-Chinchwad Municipal Corporation area. The study area is a part of administrative ward No. 64 of the Corporation. It is divided into three parts; all the three parts of the study area are distinct and separated by distance of around 2 kms from each other. There are several Self-Help Groups of women, which are monitored by a Social Initiative Department of one of the corporate located nearby. According to a recent survey done by Pimpri-Chinchwad Municipal Corporation, total population of the study area is 7247 individuals and 1369 are the number of women in the age group of 18-49 years. Main occupation of the men in this area is class four level services in ammunition factory or work on daily wages. Women are homemakers or work on daily wages. Overall education levels of the community are low. There are very few health facilities in the area and community has to travel minimum 10 kilometers to reach any health facility.

Approach and Methods

The particular adult learning strategies that we have identified in this project are:

1. Integration of experience with learning

2. Focus group discussion

3. Capacity building of peer educators

4. Health promotion by peer educators

We planned each of these strategies in order to explicate how peer education become more effective in community based health education intervention.

1. Integration of experience with learning

At the time of selection of peer educators, it was firmly believed that they knew considerable amount about what makes them and their community healthy, although they did not process any technical or scientific knowledge about it. Initially, at local level focus group discussions and community meetings were organized over a 6 month period. The basic criteria for selection of peer educators was that the women knew the community, had basic education, fluent in local language and she had an interest and enthusiasm in being trained as peer educator. Ten women who were confident and with good communication skills were selected for adult training. They were residents of project area for the last 5 years and more. This helped in establishing initial rapport and organizing community meetings.

2. Focus group discussion

Peer educators helped in conducting and facilitating meetings in community and also helped in organizing focus group discussion. Focus group discussion process helped in drawing different themes together and that further assisted in development of training module and educational material. This experience reflected in the unique way through their community sessions.

Focus group discussion was a key strategy in understanding perception and practices in the community. Women in different age group met in small groups and shared their views on reproductive health of women. To ensure all women were heard and all opinion was considered the facilitator kept the group size small and provided comfortable atmosphere. As a part of process documentation all the discussions were tape-recorded. From each discussion, a web of socio-economic, cultural, gender determining health issues unfolded. This process strengthened the adult learning possibilities and stimulated process of health education. With this experience peer educators began strategizing their health education session in the community.

Data analysis

Qualitative data was analyzed using latent and manifest content analysis. The themes emerged during the process of coding and categorization of data collected during Focus Group Discussions (FGDs). Thus, identified themes was used to gain understanding about the illness representation and used during intervention session to clarify misconceptions and raise awareness.

Quantitative data was analyzed using Statistical Package for the Social Sciences (SPSS) software Version 21. The main analysis consists of comparing mean- values of outcome measurement between groups. Data analysis includes parametric or non-parametric tests, depending on whether the various outcome data are normally distributed.

Ethics

Approval for conducting the study was taken from the institutional ethics committee. Written consent was taken from the participants for survey as well as prior to qualitative data collection. The names of the participants were coded and not used in analysis or in any part of the report. Referral linkages were established as a part of the study to provide support to those participants who reported symptoms.

Results

Results are organized in two parts. The first part describes the process of preparation and capacity building of peer educators and the second part describes the use of quantitative methods to assess effect of peer-led education in transfer of knowledge.

Preparation for peer educators training

Training module was prepared for conducting peer educators training. Different forms of health education material such as Slides, flipcharts, case studies were prepared and used as training and learning aids. Training module to provide comprehensive knowledge of reproductive morbidities was developed which consist of five topics related to reproductive morbidities of women. After review and validation from expert training module was finalized. A detailed handbook with a set of appropriately developed education tools was given to each peer educator. Necessary suggestions that came up during peer educators training and focus group discussion were incorporated in the handbook.

3. Capacity building of peer educators

Capacity building of peer educators was done through two days extensive training programme. Two refresher trainings were conducted after the main training. Pre test and post test were conducted for knowledge assessment. Training module with detailed sessions was prepared. Training techniques were used effectively and different activities such as individual and group assignment, role plays, games were used to understand subject in a better way.

During training along with technical sessions, emphasis was also given to developing communication skills. Mock practice of sessions was conducted after training. This process enabled them to understand basic knowledge about the subject and also in achieving confidence. Evaluation of peer educators performance was done at the end of the training.

4. Health promotion by peer educators

At the time of session in the community peer educators called monthly one meeting of community resident women. At most of the sites they were effective

in conducting meeting with maximum 30 women. They included women from community within reproductive age group, different cultural background, locale, occupation, education reflecting whole community. The most challenging women to involve were newly delivered women with a small child. Women gathered at one place at particular time decided by them to discuss factors that contribute women's reproductive health.

Sessions were planned in advanced and peer educators were aided with different educational material. A health education intervention programme was developed and implemented following collection and analysis of baseline data. Flipcharts, training module were used as educational material. Average session took about 45 mins.

As part of the adult education, peer educators played multiple roles. They not only conducted community trainings but prior and after to the training they provided necessary support to community. As an adult educator, to play various roles in the community a particular set of critical competencies is required, hence before conducting health education sessions in the community peer educators were equipped with knowledge, awareness and skills.

Quantitative assessment of effect of training and health promotion activities

Knowledge assessment of peer educators was done by arranging pre and post test. A Wilcoxon signed- ranked test showed that 2 days training programme on reproductive health did elicit a statistically significant change in knowledge of reproductive health in peer educators with existing knowledge ($Z= -2.670, p=0.008$). Indeed, mean knowledge rating was 6.67 (SD=2.29) and 12.22 (SD=4.0) for pre and post test respectively. Refresher training was conducted with the gap of one month with post test knowledge assessment. Statistically significant change improvement ($Z= -2.724, p= 0.006$) was seen in existing knowledge. Evaluation of peer educators was also done on the basis of confidence, knowledge, communication skills.

Knowledge assessment of community women were also undertaken by conducting pre and post test. A paired sample T test (sig 2 tailed 0.000) did obtain a statistically significant change in knowledge after peer educators session. As the study is ongoing, our understanding of the process and mechanisms underlying peer education approach success and failures is still in infancy and 60 women are covered through peer education till date.

Discussion

Peer education sessions were monitored and evaluated by researchers. All the observations by researchers were documented. There were few lessons learnt from peer education health promotion programme:

a.   Peer educators need to be selectively recruited.

b.   Extensive training and refreshers courses are key to successful peer education.

c.   At initial stage peer educators need to be supervised and supported during health education programme.

d.   Interactive training session along with different training aids improve training outcome.

e.   Drop-outs can be partially addressed by good support, reinforcement compensation and motivation.

        It was also observed that women were enthusiastic and more involved in health education as an effect of peer education. The demand for referral services was also increased. However retention is a common problem in peer programmes that can be addressed by careful selection, reinforcement, compensation and other reward.

        As an adult educator, it is important to understand a process, which helps in organization of needed field intervention method, coordination, financial management and human resource development. With current research, through process documentation a database is created in implementing a peer led health education programme. It will help to reduce dropout rate in future an also will give insight to future adult educators to improve quality and efficiency.

        Our goal in involving peer educators in health education was to promote a sense of health empowerment among members of community. Also successful peer education relates to the importance of promoting community context that enables and support desired behavioural change that is increased health seeking behavior. We hope that our work would contribute to much-needed research into the extension approach wherein our understanding about community-level processes right from selection of peer educators to equipping them to deliver goods in the community and community's response to such efforts. However, the researchers felt that the success of peer education led health promotion depends on several interlinked factors. Availability of health promotion material and resources in the community increased the likelihood that the women got engaged in health-promoting behaviors. This validated documentation will help future researchers to undertake complex form of research as part of extension programme.

Conclusion

        In the current project we utilized best educational practices to meet women's learning references, interacted with women and built connections to teach, share research, experience and information. The interaction resulted in a collection of ten motivated peer educators dedicated to exploring issues affecting women in reproductive age beyond pregnancy and post partum. The peer

educators' programmes provided learning avenues for common women in the community and have gained enhanced access to resources developed through research-based extension programme. This documentation is important to guide in further research process.

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Lifelong Learning and Skill Development

V.Mohankumar

I am privileged to give the Keynote address in this national seminar, the topic of which is Lifelong Learning and Skill Development. The chosen topic is not only appropriate but also time related as the government is giving a lot of importance to skill development to enable the Indian youth to be productive and trained manpower. Both are also given importance in the United Nation's 2030 Agenda for Sustainable Development also. Goal 4 states "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". 4.4 states that "by 2030 substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship".

I would like to start the address with the quote by Sri Aurobindo, a great Philosopher of modern India. He said that *"Education which will offer the tools whereby one can live for divine, for the country, for oneself and for others and this must be ideal of every school which calls itself national".*

Education and learning is as old as human society. It plays an important role in transformation of society. Traditionally education is passed on by a generation to the generation next through language, working skill and search for new things. Education is a continuous, systematic and lifelong process through which a child or an adult acquires knowledge, experience, skill and attitude. It is the process of development from childhood to the rest of life. That is the reason the famous saying is 'human beings learn from birth to death'. For a civilized society education is the only means and its goal is to make an individual perfect. All societies give utmost importance to education as it is considered to be a perfect solution for all evils and key to solve the problems of life. It is dynamic (and not static) which develops the child according to changing situations and times. Education encompasses everything which influences human personality and the driving force for social development which brings improvement in every aspect of the society. It also motivates, encourages and induces the individuals to take the path of progress apart from helping to modify the human behaviour. All aspects and incidents need education for a broad based and vast development. It reconstructs the society according to the changing needs of the time and place of the society. Education implies in the change of behavioural pattern of human beings as well as the indicator of change in human society. Hence, without education life of an individual is meaningless.

Learning and life are closely linked and hence, lifelong learning is embedded in all the societies. According to the French Philosopher Marquis de Condor "Education should not lead the individuals after they have left school. It should embrace all ages because learning is necessary for everybody. Education should be provided to everybody of all ages. It should provide facilities for retaining what they have learnt or to acquire new knowledge".

Keynote Address given in the National Seminar on Lifelong Learning and Skill Development held on August 19, 2017 at Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh

Education refers all kinds of learning that take place, i.e. formal, non-formal and also informal (which may include incidental also). It is a term under which all the educational efforts – nursery, kindergarten, primary, secondary, senior secondary and tertiary (collegiate/university) are included. The formal education in an institutional set-up comes to an end at a particular point of time and can again continue at any time according to the desire/wishes of the persons concerned.

Learning and education is traditionally transmitted from one generation to the other. In earlier time it was more through oral tradition as most of the people were not literate. But in the modern times apart from the traditional methods, learning also takes place through mass media (print and electronic), reading books, listening to others, seeing the happenings, witnessing the incidents, advice of elders, community and society. Learning and education are complimentary to each other. Learning has various forms such as pre-learning, reinforcement learning, classroom learning, individualized and independent learning both in small and large groups, enrichment learning, self-learning and self-directed or self-managed learning. Learning itself is ultimately an individualized and lifelong process, whereby transformation occurs within the individual but the final outcome of the learning is the application of knowledge and skill for the benefit of the society, nation and the world at large.

Learning and education is always kept at the high pedestal as it leads to enlightenment; it enriches, empowers and opens the world of knowledge. But it is not enough a person simply learns and not assimilates and converts whatever he/she has received into action or use in the life situation. Day-in and day-out learning takes place in one way or other but if the persons do not understand the components of learning in strict sense it may not come under the broad category of learning. This is amply reflected in a column written by Rajesh Mahapatra in the national daily that "India needs education not just schools as those lacking meaningful education are likely to be left powerless and therefore, become victims in any society based on informed decision-making".

The human being's life is broadly divided into four stages, i.e. childhood, adolescent, adult and old age. At each stage everyone needs new information, knowledge, skills and practice to follow. The primary education for children in schools is fundamental to lifelong learning which is expected to continue in other stages so that knowledge and skills are updated periodically. Unfortunately, for long our education system miserably failed not only to update the knowledge needed for the students but also discouraged independent thinking by students themselves. It is adequately proven that children learn fast by play-way method which in our schools either not practiced or done less. The teachers are interested to complete the curriculum within a prescribed period of time with the result children learn the least. The Right of Children to Free and Compulsory Education Act, 2009 ensured education of children a fundamental right in India. One important clause in the Act is no detention of children upto class V simply to avoid terrorizing children in the name of examination. Instead a comprehensive assessment needs to be followed to know the progress of learning in children. Unfortunately, this clause has been utterly misused equally by students, parents and teachers. The students thought they need not study anything as promotion to higher class is already assured and

automatic, parents thought that even if the children do not go to school they will get promotion and hence, most of them have not ensured their children to go to school regularly and teachers almost stopped teaching ultimately students are compelled to start learning the alphabets in class VI. Fortunately, this grave situation came to the notice of parliamentarians and educational administrators and the result is government now has taken action to introduce examination both at the end of class V and VIII with adequate opportunity for the students who fail in the examination to reappear within a month or two.

Most of the students in secondary and senior secondary schools are in adolescent stage. They are also taught the lessons from the text books. Our examination system does not testify the knowledge gained but only assesses the memorizing capacity and reproducing the same. This is precisely the reason that large number of students pass out every year could not get gainful employment. Another failure is on the part of both the parents and students. Every parent wants the child to go for higher education after completing senior secondary level knowing well that it in no way is going to give any immediate benefit. The employment opportunity not comes in the way because the person has no skill and knowledge for the post for which he/she can apply or has applied for.

The Economic Survey 2016-17 released on August 11, 2017 also indicates the need for improving the quality of education. It states that the government must work to provide quality education to help families get good return on education investments. As India emerges as knowledge based economy 'quality and relevant education' will play a significant role in economic development. The survey also states that the focus of school education so far has been on creating physical infrastructure which is underutilized and needs to shift to improving utilization of assets. Though, access to schools and enrollment has improved significantly "the challenge of quality in terms of learning outcomes remains to be addressed".

Again the students entering into the institutions of higher learning are adults and choose the subject of study, particularly arts and science with no or least planning about their future. At the end degree is in their hands but less job opportunities. They do not know that degree is only like a passport which is not enough for foreign travel. Skill is like visa which enables a person to perform. The educational institutions do not teach or practice skill aspects and hence, students with degrees in their hands roam around seeking employment. There was a time that government was the major employer. After open market policy, economic boom, introduction of electronic devices to improve the administrative machinery and above all the policy of downsizing the number of staff to reduce the administrative cost recruitment in government offices has been reduced drastically. At the same time employment opportunities are available in the private sector but they are strictly on the basis of merit and skill for which there is an acute competition.

Recently there was a news item in one of the national dailies that as per the latest survey conducted by Kelly Global Workforce Insights (KGWI) globally around 60% of the candidates in technical sectors lack right balance of hard and soft skills. As per the managers of professional/technical sectors ability to listen and team work as key soft skills they look for in potential candidates. The most important five

hard skills referred in the survey are analytical thinking, communication, evaluation/ analysis/ accuracy/ trouble shooting, technical including systems/computers/ software and complex problem solving. It has also been mentioned that team work is even more critical for engineering talent. This is an important information that needs to be given due care both by the institutions which impart education and training in the technical and vocational sector but also for the students/trainees participating in the programmes.

When the traditional education system failed to enable the students to compete in the employment market for jobs, the system turned to the need for imparting vocational skills. Hence, today the world countries including India give a lot of importance to vocationalization of education so that there is a trained manpower available for getting suitable employment. But this will be proved negative if the above said soft skills are not known to the candidates appearing in the interview as the managers are interested to pick and choose the candidates for different jobs based on both hard and soft skills. So, the vocational training and technical educational institutions should broad base the curriculum which includes both hard and soft skills so that trainees/students are not only aware of this but also practice during the academic sessions.

The career guiding institutions which enroll persons in search of jobs for further training also need to give specialized training in the soft skills – both theory and practice so that they are able to perform well in the interview before the managers who hire the manpower.

Candidates should be open to interning or taking temporary positions either in the beginning or in the middle of their career to build experience. Starting as a temporary employee or completing an internship gives talent and edge with professional/technical hiring managers, especially for the engineering candidates.

The survey also reveals that relationships play the most important role in personal branding and it is changing the way people network. Even the freelancers tap their personal and professional network to find jobs via word-of-mouth and reference. Here also the skills possessed by the freelancers have given them reputation.

Another aspect is under-preparedness in adapting new technologies which will lead to unemployment in IT sector. As per McKinsey report nearly half of the workforce in the IT services firms will be irrelevant over the next 3-4 years. According to Arvind Subramanian, Chief Economic Advisor India's current employment challenge is particularly difficult as sectors that did well in generating jobs in the country's previous economic boom years – IT, construction and agriculture are in trouble now. IT sector thought to be always a dynamic sector for India is now the new problem.

We have to appreciate the role played by open schools and open universities in providing opportunities for the students who could not pursue further education in formal system of education. For those who have discontinued their studies for many reasons, those could not get admission in formal educational institutions, those who desire to acquire additional qualification while on job and those looking for career promotion the open distance learning has provided the

best opportunity to study from home itself. However, this system being a self-study method the students loose the luxury of learning from the teachers through fact-to-face. Unfortunately, this type of learning also is of the same to that of the formal system of education in which the students learning ability is tested through examination in which they reproduce the contents of textbooks they have learnt.

As per The Economic Survey 2016-17 also states that while the number of higher educational institutions had expanded the quality of students passing out had come under scrutiny, affecting their effectiveness in the labour market.

Another side of the coin is growing number of adult illiterates. As per a Professor of National Institute of Public Finance and Policy no amount of skill development can work without a solid foundation in basic education. India's long neglect of the education system is coming back to haunt its economic ambitions.

India with a large number of youths is expected to be one of the developed countries in the world and big supplier of human manpower. At the same time the worrying factor is that even after spending enormous amount on education in different Five Year Plans, the overall literacy rate of the country in the age group 7 and above stood at 73% as per 2011 Census with male literacy at 80.9% and female at 64.6%. The compounding factor is low literacy level of the socially and economically weaker sections of the society. The absolute number of illiterates in 7 and above age group in the overall population was 282.70 million (28.27 crore) out of which female was 179.90 million (17.99 crore) while male 102.80 million (10.28 crore).

Soon after India became independent the progress of the country was accelerated through Five Year Plans. In the social sector education got large allocation of funds due to which the number of schools, colleges and universities increased enormously. Adult education has always been an integral part of education sector to eradicate illiteracy and hence, a number of adult education programmes have been implemented by the government. As on date the on-going programme is Saakshar Bharat. Though each of the adult education programme was good there found to be a lot of gap in between planning and implementation and hence, the desired results could not be achieved. Unfortunately, with no or less assured follow-up after basic literacy programme (post-literacy and continuing education) most of the neo-literates who gained literacy proficiency have relapsed into illiteracy. It is also true of many languages in India. As per the survey conducted by the People's Linguistic Survey of India (PSLI) there are 780 different languages spoken by people of India out of which 250 languages had already being lost in the last five decades. Another 400 languages are at the risk of dying in coming 50 years. Each time a language is lost, the corresponding culture is also killed. Most at risk are marginal tribal communities whose children receive no education or if they do go to school, they are taught in one of the India's 22 officially recognized languages. The survey also says that 'Maithili' which is spoken in Bihar is at least 1000 years old. Similarly, there are several languages which are surviving somehow in India but are hardly passing them on.

As per Census 2011 the total population in the age group 15+ was 838.41

million (83.84 crore) out of which 257.58 million (25.76 crore) alone was illiterates. The number of illiterates in the age group 15-34 years was 79.10 million (7.91 crore) out of which 51.40 million (5.14 crore) was female and 27.70 million (2.77 crore) male. This age group is considered to be productive and reproductive and hence, needs more attention in the area of skill development as they are the bread winners for their families. This illiterate population may slow down the progress of development as they have low skills or no skills at all with the result they are either less paid for their work or unemployed. To enable them productive and be an integral part of economic progress they need to be skilled either by improving the existing skills for horizontal mobility or by giving additional skills for vertical mobility. For those who are not skilled need to be introduced to some skill of their choice/ ability so that they are able get employment and economic stability. **While nobody denies the importance of training youth who are illiterate or neo-literate to bring them to mainstream of development and economic empowerment, the vast number is a matter of concern and the task may take long time.**

The training facilities/infrastructure available at present may not be able to cope with the demand and at the same time not possible to create additional infrastructure to that extent may require large financial outlay/ investments. Hence, it may be appropriate to use the training facilities available in all the departments for this purpose, may be in the free time available including holidays. Industries/factories can be requested to create in-house facilities for training the required manpower for jobs suitable to illiterate/neo-literate segments. A detailed planning may be required in consultation with all the stakeholders.

The learning in old age will help to meet the needs of individual health, engaging in productive employment and for self-enrichment apart from strengthening the family and community.

With the advancement of technology many new things are invented every time which almost made the entire world a global village. Anyone including the elderly people who are not well versed with the new technology will be lagging behind and left alone in course of time. Education once considered being a privilege of the people in higher echelons of society, today is for everyone with the result many from the poor families have got education and moved out of their villages/home towns to other big cities and towns and even to foreign countries for jobs. In this situation the electronic gadgets have become handy for easy and fast communication. This necessitated parents and close relatives knowing the new knowledge to operate the gadgets. The learning takes place from known to unknown, trial and error method, gadget related information booklets and a brief training.

Also quite a few of the elderly people wish to learn a new skill in the leisure time or improve the existing skill in their hands primarily for earning more or spend their time usefully and productively. Many old age homes provide these opportunities for the elderly people to learn new things but not in all the places or in a big way.

          To conclude I would like to quote Dr. APJ Abdul Kalam. He said that "Education is not just the ability to read and write but also process of human transformation. Hence, the synergy between education and learning has to be perceived and operationalised. Education is an aid to generate learning". The Indian education system is yet to go a long way to achieve quality and content. The institutions of higher learning need to strengthen the research components so that the outcome of such studies is useful to common folk.   All the educational institutions should encourage to develop independent thinking so that not only they grow but also contribute for the growth of the community and society. A country's progress cannot be judged just by constructing long roads, tall buildings and vast stadia but by learning society and well informed population who are part of inclusive growth. Swami Vivekananda rightly said that "Death is better than a vegetating ignorant life, it is better to die on the battle field than to live a life of defeat".

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Mainstreaming ICT among Muslim Minority Women: A Diagnostic Study

Neha Kumari
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India is a land of diversities. This diversity is also visible in the spheres of religion. The major religions of India are Hinduism (majority religion), Islam (largest minority religion), Sikhism, Christianity, Buddhism, Jainism, Zoroastrianism, Judaism and the Bahá'í Faith. India is a land where people of different religions and cultures live in harmony. This harmony is seen in the celebration of festivals. The message of love and brotherhood is expressed by all the religions and cultures of India. Whether it is the gathering of the faithful, bowing in prayer in the courtyard of a mosque, or the gathering of lamps that light-up houses in Diwali, the good cheer of Christmas or the brotherhood of Baisakhi, the religions of India are celebrations of shared emotion that bring people together. People from the different religions and cultures of India, unite in a common chord of brotherhood and amity in this fascinating and diverse land. Above all As per Article 14 of the Indian Constitution "the State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India".

Minority Religions

The Union Government set up National Commission for Minorities (NCM) under National Commission of Minorities Act, 1992. As per the Gazette notification under Section 2 (c) of the National Commission for Minorities Act, 1992 the minority communities include Muslims, Sikhs, Christians, Buddhists, Zoroastrians (Parsis) and Jains. However, the Ministry of Minority Affairs in Government of India established in 2006 is the apex body for the Central Government's regulatory and developmental programmes for the minority religious communities in India.

Literacy rate of Minority Religious Groups

As per Census 2011 Jains have 13.57% illiterates aged seven and above among all communities. This number is 36.4% for Hindus, 32.49% for Sikhs, 28.17% for Buddhists, and 25.66% for Christians. The Census figures show that Jains have the highest percentage of educated members who are graduates and above. With 17.22 crore Muslims (Census 2011) who form the second largest community and constitute 14.6% of the total population of India is having the highest percentage of illiterates (42.72%) in the age group 7 and above. Only 2.76% of the Marginalized Muslims are educated till graduation level or above.

> **This article is made out of Ph.D thesis submitted by the author to University of Delhi.**

Role of Madrasas in Education of Muslim Children

Educational backwardness of Indian Muslims is a national problem. But so long as they do not respond to remedial measures, it is difficult to be resolved. Madrasas must be transformed into modern educational institutions with Islamic subjects as optional courses.

Madrasas by and large initiated during the medieval period and got constitutional provisions to promote education and culture of Islam. Majority of mosques have separate space called "Maktab" where students learn Islamic principles and recite Quran. Maktab was meant for primary level education and Madrasas at Senior Secondary level. The establishment of "Darul Uloom" at Deoband was a major landmark in Madrasa education primarily dependent on public donation. Their founders initiated chain of Madrasas all over the country. It is observed that there was a lack of uniformity in the curriculum in Madrasas across the country. Some of them favored only traditional Islamic education and culture. After independence, efforts have been made to provide English and modern opportunities in Madrasas as well. Few of them incorporated labour market education in Madrasas. Jamia Milia Islamia and Aligarh Muslim University initiated some modern technology based education in India. Marginalized Muslim population preferred joining Madrasas than government schools due to economic and religious issues.

However, Madrasas still have a lot of affinity towards religious education compared to modern curriculum. Although, some of the community people articulated that modernization of Madrasas education is the need of the hour and that learning mere religious values is not a sufficient to avail good employment opportunities but leaders of Madrasas still have inhibitions about incorporation of technology into Madrasa curriculum. They assert that science and technology education along with Madrasa education will dilute the real purpose of Madrasa which play a prominent role to impart education among Muslim population. Many schemes have been introduced over the years seeking the importance of Madrasa in mitigating educational backwardness of Muslims. Government propounded and implemented the schemes to incorporate science and technology in Madrasa curriculum but their lackluster implementation has restrained them from reaching deep to the grassroots level and the desired level of achievement.

Apart from Madrasa, Muslim children prefer to go to those schools which have Urdu medium. Unfortunately, in India Urdu is directly connected to Muslim minority community rather than recognizing it as an age old language with rich culture but the pathetic state of Urdu schools needs to be looked into and remedied. These schools suffer from general neglect; they have very limited infrastructure, their teachers lack motivation; in many states appropriate textbooks simply do not exist; and a large number of vacancies have been left unfilled. It is high time that English is made a compulsory subject in these schools and even it can be used as the medium of instruction for mathematics and the natural sciences, while Urdu can be the medium for other subjects. This would help the students improve

English language without which they will not be able to gain admission in good universities or compete in the job market.

Educational backwardness of Indian Muslims is a national problem. But so long as they do not respond to remedial measures, it is difficult to be resolved. Madrasas must be transformed into modern educational institutions with Islamic subjects as optional courses. A new pedagogy of development from the perspective of Muslim Indians needs to be developed which can enable them to overcome barriers to access and equity by building on existing knowledge, experience and skills, in order to open up highly relevant and effective new understandings and competencies.

Manifestation of Communication and Emergence of ICT

Communication has been there with the very genesis of civilization and culture. Human beings have been communicating through verbal and non-verbal means. Effective communication plays a pivotal role in resolving problems and forming a network. Communication patterns were initially limited to non-verbal and later on incorporated verbal communication by encouraging dialogues.

With the advent of globalization and urbanization from the 20th century onwards, there were considerable changes in ways of communication. Those who heavily dependent on writing letters now do the same through e-mail which is the fastest mode. Other modern facilities available are web and social networking where abundant information is available.

There are four phases of development of Information Technology and Communication and they are - Pre mechanical phase, Mechanical Phase, Electromechanical Phase and Electronic Phase. It started from ''pre mechanical'' phase between 3000 BC and 1450 AD where communication was done through drawings on stones called "petroglyphs". The Mechanical Phase was between 1450 and 1840 AD. It was noted as the beginning of the foundation of technology where Blaise Pascal invented mechanical computer and Charles Babbage developed "difference engine" for evaluating polynomials. The phase of 1840 to 1940 AD is called as Electromechanical phase. This phase witnessed the beginning of telecommunication. During this phase telephone and Radio came into existence. This phase earmarked the invention of the first digital computer around 1940 in United States. Initially, computer was programmed using punched cards.

The time from 1940 till today is called electronic phase. The "ENIAC" was the first high speed digital computer that can be reprogrammed to solve many complex computing problems. The phase witnessed the development of Graphical User Interface, Programmable logic circuits and Integrated Circuits and microprocessors. From then onwards technology changes rapidly every day, "Use of Computer", first transformed into Information technology (IT) and then into Information and Communication Technology (ICT). The advent of Internet revolutionized the world and created "Information Infrastructure". Information became power and a basic tool

of life globally. In the 20th century, world witnessed lots of advancement in Science and Technology. Efforts were made to pass on the traits of science and technology in the field of education. All these dimensions as an extension of alternate education, helps in creating knowledge and empowered society. ICT thus helps in socio-economic development of the various sections of the society.

ICT Integration in Education and Teaching Pedagogy

ICT as a pillar in education induces learning and inculcates new skill sets among the students. It replaces traditional learning environment with student centric interactive sessions. With the integration of technology, education & learning is not only confined to classrooms. Students sitting in their respective rooms can access lectures of the top universities with access to shared resources and material. Technology transformed conventional classrooms into smart ones, motivates students for further research and exploration. It can revitalize classroom discussions, improve understanding of students and can keep them captivated and attentive throughout the session.

Mainstreaming ICT in Madrasa Education

Dissemination of Information and Communication Technologies remain exceedingly low in marginalized communities. Many girls from minority community lack freedom of speech and decide their own career choices. Mostly decisions are enforced on them by male members of the family. Additionally, girls residing in Madrasa are not allowed to use any ICT tools in the premises. The environment in Madrasa is rather conservative. The curriculum followed in madrasa includes theology, philosophy, scholasticism and logic which alone do not assure employment opportunities in the competitive world. Madrasa education seems to be working on traditional pattern with no emphasis on research components. Hence, many of the madrasa graduates turn to petty business, instead of employment in organized sectors. Some of the major shortcomings of Madrasa education system are:

- Absence of definite aims and objectives

- Lack of basic facilities like proper building, classrooms, furniture, blackboard and other equipments

- Outdated traditional methods and technique of teaching-learning

- Isolation from modern developments in the area of natural and social sciences and over emphasis on the traditional subjects, with a negative outlook towards modern subjects.

People live in competitive world today. Curriculum of the educational institutions should emphasize on the needs and requirements of the employment market. Mere religious education is not sufficient to sustain in the Knowledge Economy. Hence, it is essential that Madrasa education should be mainstreamed and urgent need to incorporate science and technology in the curriculum.

In view of this, the article highlights the potential of ICT as a weapon to bridge the socio-economic gap and its role in empowering the disadvantaged sections of the society. It also discusses the perception of Muslim minority girls towards ICT and the factors hampering their learning. Income, religion, gender were some of the factors that are correlated with learning technical skills. ICT can be the only tool that can mitigate the poverty, educational backwardness and weapon to fight with the norms of patriarchal society.

Related Literature

Digital India is an ambitious programme launched on 2nd of July 2015 by the Government of India. It is a vision to transform India into a digitally empowered society. The focus is to digitally empower the citizens of India. The Digital India Programme is a mission and the idea to prepare Indian masses for a knowledge future by making technology as an essential part of life. Technology has the power to transform lives. It can empower and connect the citizens of the country. It can be used as a bridge to fill the socio economic gap and can mitigate poverty.

Khan and Ghadially (2009) in "Empowering Muslims in Computer Education: A Gender Analysis" highlighted the importance of ICT in bringing changes at social-economic level and promote empowerment of minorities and marginalized. This research paper has been contributed by professors from Indian Institute of Technology, Mumbai as part of innovative project in local Muslim Minority Community. Again this paper as part of the digital library initiatives, accommodated uses and barriers of computer education such as internet use educational, psychological and social use of computers by the minorities.

15 Point Programme, the recent initiative of Govt. of India also covered modernization of Madrasa Education to the background Muslim Minority Population. The scheme covered scholarships and providing special grants for creating infrastructure including setting-up of Computer Labs and providing Smart Classrooms. The objectives of 15 Point Programme is to enhance education and improving living conditions for minority groups.

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) is one of the most important initiative of the government at Secondary and Higher Secondary level (class IX to XII). The scheme was launched in 2009 by the Union Ministry of Human Resource Development (MHRD) with funding 75% by Centre and 25% by State. The scheme highlights the importance of secondary education after the success of Sarva Shiksha Abhiyan at the elementary level. It includes the idea of "Mobile Schools" and "Khul ja Sim Sim" project to extend ICT based interventions to the community level.

ICT is an essential component of secondary schools and hence, computer aided learning has been incorporated and assimilated in 2004 with specific changes and modifications in 2010 for capacity building of the students. The major objective of the scheme is introduction of multimedia labs in government and government aided schools, especially in lower socio-economic regions. Promotion of Smart Schools, motivation and capacity building of teachers regarding adoption of technology and improving pedagogical methods of teaching are some of the common capsules of the programme. Government also decided to award scholarships to meritorious students and felicitating competent teachers. Approximately 150 smart rooms, 3500 model schools have been constructed at the district level. A new scheme of vocationalisation of secondary education started in 1988 which had provided multiple IT based centrally sponsored programmes of vocationalisation of the secondary education. It is also linked to employability. However, women need gender sensitive policies and programmes which should ideally be supervised by women for growth and development. The focus on development programmes should be women centric.

Methodology

Present study was descriptive in nature. Descriptive design was selected to understand the research problem in-depth. The study was conducted in Delhi. The investigator covered all the nine districts of Delhi for data collection. Exhaustive Schedule was constructed for Data Collection. Further Focus Group Discussions were conducted in Madrasa to delve into their perception towards ICT. Data Collection was done in two stages. In the first stage, Stratified Random Sampling was used to select Madrasa and the government schools from various districts. In the second stage purposive sampling was used with major focus on girls studying in Madrasa. Sample size of the study was 300. Bivariate Correlation and Independent Sample T test were used to assess the income and religion as one of the factors hampering the technical progress of Muslim Minority girls.

Analysis

The underlying section discusses the role of ICT, its usage and barriers restraining them to progress.

Table – 1

Number of Respondents in Madrasa and Government Schools

Schools	Number of Respondents
Madrasa	250
Government Schools	50
Total	**300**

Figure-1: Number of respondents having access to internet
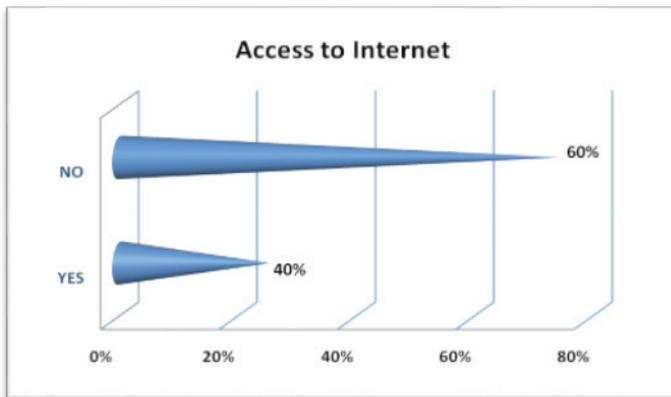
Figure-1 reveals that 60% respondents out of 300 do not have access to Internet.

Pearson's Bivariate Correlation test (Table-2) was used to study adoption of technical skills when access to ICT was present. This test was used to assess the potential to learn and explore when they were given ICT facilities.

Table-2

Bivariate Correlation between Access to Computer and Adoption of Technical Skills

		Access to computer
Access to computer	Pearson Correlation	1
	Sig. (2-tailed)	
	N	441
Using e-mail	Pearson Correlation	.522**
	Sig. (2-tailed)	.001
	N	441
Online learning	Pearson Correlation	.508**
	Sig. (2-tailed)	.001
	N	441
Using social networking websites	Pearson Correlation	.539**
	Sig. (2-tailed)	.000
	N	441
Using power point	Pearson Correlation	.500**
	Sig. (2-tailed)	.001
	N	441
Using excel	Pearson Correlation	.481**
	Sig. (2-tailed)	.001
	N	441

Results indicate that Pearson correlation coefficient was statistically significant at .01 level percent. It can be inferred that ICT usage fosters creativity and induces learning. Linking Madrasa education with science and technology subjects will upgrade skills and hence employment opportunities.

Table-3
Usage of mobile phones

Mobile Applications	Percentage of respondents
Major basic applications of mobile camera/ calculator/calling/saving contact	65.10%
Google maps	40%
Online shopping	60%
Ticket booking/ cab booking like Ola /Uber	50%
Mobile banking	50%
Paying bills through mobiles	60%

Table-3 indicates that respondents having access to mobiles are more inquisitive and tech savvy. Most of them use advanced mobile applications like Google maps, M-banking, etc.

To understand how use of ICT tools in institution enhances learning and makes the environment more interactive, Pearson Correlation test (Table-4) was used between the variables – (1) Use of ICT tools in institution and (2) Adoption of technical skills.

Table-4
Bivariate Correlation between Use of ICT tools in institution and adoption of technical skills.

		Use of ICT tools in Institution
Use of ICT tools in institution	Pearson Correlation	1
	Sig. (2-tailed)	
	N	441
e-mail	Pearson Correlation	.736**
	Sig. (2-tailed)	.000
	N	441
Learning from educational resources available online	Pearson Correlation	.769**
	Sig. (2-tailed)	.000
	N	441

Using social networking websites for professional networking	Pearson Correlation	.869**
	Sig. (2-tailed)	.000
	N	441
Microsoft Word	Pearson Correlation	.549**
	Sig. (2-tailed)	.000
	N	441
Power Point	Pearson Correlation	.889**
	Sig. (2-tailed)	.000
	N	441
Excel	Pearson Correlation	.544**
	Sig. (2-tailed)	.002
	N	441
Understanding of the subject	Pearson Correlation	.724**
	Sig. (2-tailed)	.001
	N	441
Retention of facts and figures	Pearson Correlation	.853**
	Sig. (2-tailed)	.001
	N	441
Classroom presentations make classes more interactive	Pearson Correlation	.739**
	Sig. (2-tailed)	.002
	N	441

It is noticeable from Table-4 that Pearson correlation coefficient was statistically significant at .01 level i.e. (99% level of confidence). Since the Pearson Correlation Coefficient r is positive, it indicates positive correlation. Use of ICT tools in institution is positively correlated with adoption of technical skills. It can be inferred that ICT usage in the institution whether Madrasa or government schools has positive impact on learning as it fosters creativity, exploration and makes the environment interactive and student centric.

To draw comparisons between the learning environment of Madrasa and Government Schools, an independent samples t test was used between the two.

Table-5
Comparative Study of Adoption of Technical Skills between Respondents in Government Schools and Madrasa

Using Mobiles								
SMS	Equal variances assumed	5.34	.021	1.15	439	.028	.043	.037
	Equal variances not assumed			1.15	429.49	.027	.043	.037
Online learning through mobile	Equal variances assumed	15.62	.000	1.99	439	.048	.084	.042
	Equal variances not assumed			1.99	428.76	.048	.084	.043
Mobile_apps	Equal variances assumed	25.36	.000	2.67	439	.008	.120	.045
	Equal variances not assumed			2.67	430.67	.008	.120	.045
Social messenger	Equal variances assumed	4.12	.043	1.01	439	.03	.042	.042
	Equal variances not assumed			1.01	433.51	.03	.042	.042

It can be inferred that environment of Madrasa is rather conservative restricting use of ICT aids as compared to government schools.

Table – 6
Correlation between Gender Biasness and Adoption of Technical Skills

		Feel biasness as a girl in learning ICT at home
Feel biasness as a girl in learning ICT at home	Pearson Correlation	1
	Sig. (2-tailed)	
	N	450
e-mail	Pearson Correlation	-.432[**]
	Sig. (2-tailed)	.000
	N	450
Online learning	Pearson Correlation	-.443[**]
	Sig. (2-tailed)	.000
	N	450

Social networking websites	Pearson Correlation	-.443**
	Sig. (2-tailed)	.000
	N	450
SMS	Pearson Correlation	-.125**
	Sig. (2-tailed)	.008
	N	450
Google_mobile	Pearson Correlation	-.386**
	Sig. (2-tailed)	.000
	N	450
Mobile_apps	Pearson Correlation	-.249**
	Sig. (2-tailed)	.000
	N	450
Social messenger_mobile	Pearson Correlation	-.385**
	Sig. (2-tailed)	.000
	N	450

**. Correlation is significant at the 0.01 level (2-tailed).

It can be inferred from the Table-6 that gender biasness is negatively correlated with adoption of technical skills. The results indicate differences in adoption of technical skills between boys and girls. It can be clearly interpreted that females are less exposed to technology as compared to their male counterparts, one of the major drawbacks of patriarchal society.

Table-7
Cross Tabulation between Access and Gender

Response		Gender	
		Female	Male
Yes	% within Gender	83.6%	96.0%
No	% within Gender	16.4%	4.0%
	Total	100%	100%

Results from Table-7 indicate that boys are more technically sound, primarily due to access to ICT tools. 96% of boys out of the total respondents have access to ICT as compared to 83.6% girls.

Conclusions

i. Majority of the schools and Madrasa where concentration of lower income Muslim minority population is high, still do not have proper labs, functional computers, computer instructors and computer teachers.

ii. It can be concluded from the statistical inferences that access was positively correlated with the adoption of ICT skills. It indicates that minority girls are lagging behind not because of lack of capability but due to lack of opportunities.

iii. Many girls mentioned during Focus Group Discussions that they come from conservative families where using mobile or Internet is not so prevalent. Girls accentuated that their elder brothers have access to mobiles but the family is apprehensive about the usage of mobile phone by a girl. Using internet is not very prominent among Lower Income Group Muslim Minority girls. Also few girls during group discussion mentioned the problems they face due to strong affinity towards the religion.

iv. The results indicate poor understanding of technical concepts. Technical fundamentals are not very strong. Few students have the basic knowledge of internet and various software but they need guidance and mentoring for further polishing their technical skills.

v. The barriers regarding ICT are lack of technical facilities, no computer labs, many computers could not meet educational needs. Gender and Religion also are the barriers but the major barrier is lack of Income.

vi. It can be concluded from the findings that first and foremost thing is to provide the minority children access to ICT. Access will provide them the requisite opportunities to explore and learn.

vii. Use of technology in teaching and learning will replace the traditional concept of teaching pedagogy and will transform a monotonous classroom lecture into interactive sessions. Teachers also said that technology has the capability to connect teachers and students round the clock. Students can take benefits of online lectures without any restriction as learning is not confined to classroom lectures only. With the advent of technology, students can learn and connect with the mentors worldwide.

viii. It can be concluded from the responses of students and teachers during the focus group discussions that classroom sessions need to be more practical and skill oriented to sustain the Knowledge Economy. Theoretical sessions should be reinforced with practical.

ix. Every student has different interest, caliber, understanding level and pace of learning. It is difficult for a teacher to keep the pace with each and every student. With the help of digital resources students can learn and

understand at their own pace. Online courses motivate students to do self-learning. Students should be persuaded to learn additional concepts from Internet. ICT training of teachers is equally important as skilled teacher induces curiosity and learning. Developing Knowledge Economy is a continuous process which requires persistent and diligent efforts from every stakeholder. Innovation begins from competent teachers. Technological aids can also be used as a tool for formative and summative evaluation.

x. Bivariate Correlation between use of ICT in teaching pedagogy and adoption of ICT skills indicate positive impact of technological aids in teaching.

xi. Current ICT infrastructure in Madrasa is in shambles. The curriculum of Madrasa is outdated and has not been able to keep-up the pace with the modernized education. It is imperative to mainstream Madrasa education to cope-up with the upcoming challenges of the globalized world.

xii. It can be inferred from the field study that boys are more technically sound than girls, mainly due to gender discrimination in the patriarchal society. The results reveal that girls are often more into household chores rather than learning as compared to their male counterparts. The results of t test between gender and adoption of technical skills indicate gender biasness as one of the barriers.

xiii. Girls studying in Madrasa also articulated to align modern education with religious education and integrating technology leading to better employability. The girls in Madrasa stated that mere religious education cannot provide ample opportunities for employment but learning mainstream subjects may help to sustain in Knowledge Economy.

Recommendations

Digital Literacy - Internet and ICT tools should be incorporated into teaching pedagogy. Internet fosters creative ideas and imagination and supports collaborative learning. Software such as Excel, Database, etc. can be helpful in managing data of students and every stakeholder.

Knowledge Integration - To make classroom discussions more interactive and knowledge based, it is imperative to integrate technology. Assessments should include collaborative project work, extensive discussions making it more research exploratory in nature.

Knowledge Creation - Incorporation of technology in pedagogy will lead to improved curiosity and critical thinking which in turn will open avenues for new meaningful ideas and innovations for which the following will be of great use:

1. Classroom teaching needs to incorporate technology in terms of internet, smart boards, projectors, etc. to make them more interactive and to become a breeding ground for extensive discussions and innovative ideas.

2. Capacity building programmes and technical workshops should be organized at government schools and Madrasa.

3. Government Schools need to provide proper infrastructure for ICT labs within their premises.

4. Maintenance of labs and equipments is critical for their long life. Qualified lab technicians can be involved to manage such labs.

5. Qualified computer teachers should be appointed for the schools and Ulema for Madrasa to teach required technical skills. Innovation begins with competent teachers. A good computer teacher can also arouse interest in students to adopt and embrace technology in order to compete with the globalised world. To infuse technology in classrooms, it is imperative for the teachers to have clarity in understanding of Technological, Pedagogical, Content and Knowledge (TPACK) Framework.

6. Homework should involve good amount of research which increases curiosity in students to delve more into the subject matter on their own using internet, online tutorials blogs, etc.

7. National and international level workshops should be conducted inviting representatives from such schools to spread awareness for leveraging ICT in education.

8. Majority of respondents are uninformed about the fact that they are already using ICT tools like television, radio, mobile, etc. Even attending calls or SMS comes under application of ICT. They are also ignorant about the fact that any small business also requires IT integration. But their perception is that using ICT means using a computer for difficult and complex tasks. Technical workshops are needed at different levels to make them understand that even if they are using normal keypad phones for calling that also comes under usage of ICT. Additionally, small business or vocational courses like beauty parlour, tailoring also needs networking and customer management. One can expand the small business or profit with the assimilation of technology. Now-a-days technology finds its place in almost every profession. Fusing technology with vocational skills will further expand their horizons to a higher level.

9. Skill enhancement programmes need to be conducted at national level. Students need to be sensitized towards bright career prospects in information and communication technology.

10. It is imperative to monitor socio-economic conditions of minorities and implementation of schemes at regular intervals. Monitoring committees should be appointed at district level for continuous evaluation of ICT schemes in schools and Madrasa.

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Green India Mission - A study on Awareness among B.Ed. and M.Ed. Students

Asma
Farooq Ahmad

About the importance of forests Nund Rishi, a famous Kashmiri Sufi saint said in Kashmiri that *"**Ann poshi teli yeli wann poshi", meaning "Food will last as long as forest lasts**"*

Climate change is a burning issue in today's world and its impacts are felt in every corner of life. According to experts climate change is the biggest threat to the world economy (Guardian, UK). So, adverse effects of climate change are discussed in various platform of the world as it leads to loss of human lives. Unfortunately, the main victims of this change are third world countries. Hence, both the national governments and international agencies have come forward to mitigate the bad effects of climate change. India is a great supporter of all the efforts taken in this direction. The Indian government promised in Paris Submit 2015 to plant more trees and increase the forest cover by 2030 so that carbon emission is absorbed from 23% to 33% (Guardian, UK). Even in the year 2008 an action plan was framed by the then government headed by Prime Minister Dr.Manmohan Singh which was the combination of eight missions and they were:

1. National Solar Mission
2. National Mission for Enhanced Energy Efficiency
3. National Mission on Sustainable Habitat
4. National Water Mission
5. National Mission for Sustaining the Himalayan Ecosystem
6. National Mission for Green India
7. National Mission for Sustainable Agriculture
8. National Mission on Strategic Knowledge for Climate Change.

Of the eight missions which are in operational, each of which is a sectoral response to the impacts of climate change. Three of them — on solar energy, afforestation and energy efficiency seek to slow down the growth of India's emissions. Another three — on agriculture, water and Himalayan eco-systems are about initiating measures to adapt to the effects of climate change. The remaining two — on sustainable habitat and strategic knowledge are service missions and seek to create more knowledge on useful climate responses.

After the new government headed by Prime Minister Narendra Modi came to power four new missions were added to National Action Plan on Climate Change (NAPCC) in 2015 and they were:

1. Promote Wind Energy
2. Build Preparedness to deal with Impacts on Human Health
3. More Effective Management of India's Coastal Resources
4. Harness Energy from Waste.

The Wind Mission is modelled on the National Solar Mission which seeks to increase the share of renewable energy in India's energy mix. The Solar Mission has been one of the most important components of NAPCC as it has the maximum impact on slowing down the growth of India's greenhouse gas emissions. The government recently enhanced the target of electricity production under the Solar Mission from the original 20,000 MW by 2022 to 100,000 MW.

The Wind Mission is likely to be given an initial target of producing about 50,000-60,000 MW of power by the year 2022. Already, there is about 22,000 MW of installed capacity of wind energy in the country. Like the Solar Mission, the Wind Mission will be serviced by the Ministry of New and Renewable Energy.

The Health Ministry, meanwhile, has been working on finalising a 'mission' on dealing with climate impacts on human health — an area that got overlooked when the original eight missions were being finalised. The 'mission' is to carry out a comprehensive assessment of the kind of effects climate change is likely to have on human health in different regions of the country and build up capacities to respond to these and also to health emergencies arising out of natural disasters.

The 'mission' on India's coastal areas is to prepare an integrated coastal resource management plan and map vulnerabilities along the nearly 7000 km long shoreline. The Environment Ministry, which already regulates activities along India's coasts through the Coastal Regulation Zone (CRZ) rules is supposed to house and service this mission.

The waste-to-energy mission to incentivise efforts towards harnessing energy from all kinds of waste and is again aimed at lowering India's dependence on coal, oil and gas for power production.

Key objectives of the Missions

- To enlarge forest/tree cover to the extent of 5 million hectares.

- To get better quality of forest/tree cover on another 5 million hectares of forest/non-forest lands;

- To improve/enhance eco-system services like carbon sequestration and storage (in forests and other ecosystems), hydrological services and biodiversity along with provisioning services like fuel, fodder, and timber and non-timber forest produces

- To increase forest based livelihood income of about 3 million households.

Mission Targets

The following targets to contribute towards achievement of the overall goal/outcomes of the missions:

- Improvement in quality of forest cover and ecosystem services of forests /non-forests, including moderately dense, open forests, degraded grassland and wetlands (5 m ha).

- Eco-restoration/afforestation of scrub, shifting cultivation areas, cold deserts, mangroves, ravines and abandoned mining areas (1.8 m ha).

- Improvement in forest and tree cover in urban/peri-urban lands (0.20 m ha

- Improvement in forest and tree cover on marginal agricultural lands/fallows and other non-forest lands under agro forestry /social forestry (3 m ha)

- Management of public forest/ non-forests areas (taken up under the Mission) by the community institutions.

- Adoption of improved fuel wood-use efficiency and alternative energy devices by project-area households.

- Diversification of forest-based livelihoods of about 3 million households living in and around forests

Importance of Green India Mission

Deforestation is one of the main causes of climate change and that was the precise reason programme of Green India Mission merged in the National Climate Change Action Plan. One of the core objectives of this mission is to increase the forest cover of India through massive plantation programmes so that the carbon emissions are absorbed to the desired level. Plantation is an important and easy tool for the mitigation of climate change through the carbon sequestration.

Worth of forests in relation to climate change

The Green India Mission recognizes the influence and potential of forests and other natural ecosystems on climate adaptation/mitigation, food, water, environment and livelihood security of tribal and forest dwellers specifically and the nation at large in the context of climate change. The mission is thus in a unique position to significantly contribute to sustainability of other missions for the following reasons:

Improvement in climate

Over the past decades, national policies of conservation and sustainable management have transformed the country's forests into a net sink of CO_2. From 1995 to 2005, carbon stocks stored in our forests was estimated to have increased from 6245 million tonnes to 6622 million tonnes thereby registering an

annual increment of 37.68 million tons of carbon or 138.15 million tonnes of CO_2 equivalent.

Food security

Forests are essential for maintaining favourable and stable conditions needed for sustained agricultural productivity. In Nayagarh, Odisha, maintaining agricultural productivity is one of the key reasons for forest protection by the community. According to a study by Nadkarni, as much as 50% of the productivity of paddy fields in the Western Ghats is actually attributed to leaf litter collected from the forests. Organic matter is essential to maintain the fertility, structure and water-holding capacity of soils in the high rainfall region. Forests provide food directly in the categories like fruits, flowers, leaves, stems, seeds, roots, tubers, mushrooms, etc.

Water security

Forests are vital for maintaining the hydrological cycle and regulating water flows and sub-soil water regimes, recharging the aquifers and maintaining the flow of water in rivers and rivulets. However, the relationship between forests and water flows, especially the low base flows, is not always as straight forward as often believed. Forest ecosystems are the source of a large number of rivers and rivulets in the country. The forested watersheds have better availability as well as quality of water than watersheds under alternative land uses. For example, the Shimla catchment forest was established in the early 20th century exclusively for securing the catchment and to protect 19 springs and streams that provided drinking water supply for Shimla town, the summer capital of British India. It comprises more than 1000 hectare of very dense forest.

Livelihood security of local communities

Forests provide a range of provisioning services, particularly fuel wood, fodder, small timber, NTFP and medicinal plants, and artisan raw material like canes and bamboo, that are crucial to livelihood security of forest-dependent communities. Nearly 27% of the total population of India, comprising 275 million rural people, depend on forests for their livelihoods. This number includes 89 million tribal people, who constitute the poorest and most marginalized section of the country. NTFP sector with an annual growth rate between 5-15% also contributes to 75% of the forest sector export income.

To make the Green India Mission more effective the government headed by Shri Narendra Modi announced that this mission will be linked to MGNREGA to facilitate afforestation of 10 million hectares of land cover in the next ten years to provide forest based livelihood income to three million households (Economic times).

Rationale of the study

Uttarakhand is the state in the lap of Himalayas which is full of plant and animal diversity. The total area of the state is 53,483 km^2 of which 86% is mountainous and 65% is covered by forests. According the research reports forest cover of the state is decreasing fast. As per Times of India, December 12, 2015 around 268 sq.km of forest cover has been lost in two years and the first reason behind is development projects for which a lot of forests have been cleared and the second reason is forest fire.

The people of this hilly state are directly or indirectly depend on the forests for their livelihood. It is very important for the people to be eco-sensitive and also be aware of Green India Mission. Already a number of disasters have taken place due to environmental degradation like flood in Kedarnath in the year 2013 in which heavy human and properties were lost. Hence, this is the time every citizen of the state should know how to protect and preserve the environment, particularly the students who are the guardians of the future. Unless they know well the policies protecting environment, they cannot contribute to preserve the same. Hence, a study has been done and the data collected from B.Ed, M.Ed students who are certain to be the teachers in future and shape the characters of the students.

The objective of the study was to assess the level of awareness among the B.Ed. and M.Ed. students regarding Green India Mission.

The methodology used in the study was quantitative approach. Data was collected from primary and secondary sources apart from consulting internet and websites.

The area of study was Almora District in Uttarakhand and the population of the study was B.Ed. and M.Ed. students of S.S.J Campus, Almora.

The sample was 37 co-researchers selected through random sampling method.

The tool used for the collection of data was self-made close ended questionnaire which was administered for collection of data. The tool consisted of 9 items and the responses were based on "Yes" or "No" and the 10th item was open ended in which one can give detailed opinion/information.

The data collected was analysed question-wise as shown in the tables below with the help of SPSS. Apart from this the data was also classified into four categories - on the basis of educational qualification, arts and science stream, students from rural and urban areas and gender.

Question-wise analysis

Table – 1
Have you heard the name of National Green Mission?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	24	60.0	60.0	60.0
No	16	40.0	40.0	100.0
Total	40	100.0	100.0	100.0

60% of the students only have heard the name of National Green Mission while 40 % not heard at all.

Table – 2
Do you know which Government introduced this Mission?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	31	77.5	77.5	77.5
No	9	22.5	22.5	100.0
Total	40	100.0	100.0	100.0

77.5% knew which Government introduced this mission while 22.5% did not know the information at all.

Table – 3
Do you know why National Green Mission was introduced in the country?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	10	25.0	25.0	25.0
No	30	75.0	75.0	100.0
Total	40	100.0	100.0	100.0

Only 25% of the respondents knew about the reason for introducing National Green Mission while 75% was ignorant.

Table - 4
Are you aware of the key objectives of National Green Mission?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	19	47.5	47.5	47.5
No	21	52.5	52.5	100.0
Total	40	100.0	100.0	100.0

47.5% found to have been aware of the key objectives of the mission while 52.5% were ignorant on the same.

Table - 5
Have you seen any activities of the mission in your area?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	33	82.5	82.5	82.5
No	7	17.5	17.5	100.0
Total	40	100.0	100.0	100.0

82.5% of the respondents have told that they have seen some activities but 17.5% have informed that they have not seen.

Table - 6

Have you heard the name of National Climate Change Action Plan?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	32	80.0	80.0	80.0
No	8	20.0	20.0	100.0
Total	40	100.0	100.0	100.0

80% found to have heard the name while 20% did not.

Table - 7
Do you know the eight Missions regarding Climate change Mitigation?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	5	12.5	12.5	12.5
No	35	87.5	87.5	100.0
Total	40	100.0	100.0	100.0

Only 12.5% of respondents were in know of the eight missions while 87.5% did not know at all.

Table - 8

Have you heard the name of forest cover?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	13	32.5	32.5	32.5
No	27	67.5	67.5	100.0
Total	40	100.0	100.0	100.0

32.5% have informed that they have heard about forest cover while 67.5% did not hear at all.

Table - 9
Do you know the forest cover of Uttrakhand?

Category of response	Frequency	Percent	Valid %	Cumulative %
Yes	7	17.5	17.5	17.5
No	33	82.5	82.5	100.0
Total	40	100.0	100.0	100.0

17.5% respondent positively while 82.5% in negative.

Level of awareness about Green India Mission on the basis of Educational Qualification

The analysis of the data revealed that 67% of M.Ed. and 52% B.Ed. students were aware of Green India Mission, while 33% and 48% of M.Ed. and B.Ed. students found to be not aware of.

Level of awareness about Green India Mission on the basis of Art and Science stream students

In this 54% of the students from science stream and 52% of arts stream students were in know of Green India Mission while 46% of science stream and 48% of arts stream expressed that they do not know about the mission.

Level of awareness about Green India Mission on the basis of Rural and Urban students

According to the data available 50% of B.Ed. and M.Ed. students living in rural areas of Almora were aware of Green India Mission and the remaining 50% were not aware.

On the other hand 64% of B.Ed. and M.Ed. students living in urban areas reported to be aware of the mission while 36% only found to be not aware.

Level of awarness about Green India Mission on the basis of Gender

The data reveals that female students found to be far ahead of male students in knowing about Green India Mission. As per data 63% of female B.Ed. and M.Ed. students told that they knew about Green India Mission while only 37% informed that they did not know.

At the same time only 38% of male students of B.Ed and M.Ed. courses found to be aware of the mission while the large chunk of 62% students did not know it at all.

Finding

On the basis of the findings it may be said that there found to be a difference in the level of awareness about Green India Mission among B.Ed. and M.Ed. students. The major difference found that girls have better awareness in comparison to boys, may be because they are the active participants in agricultural operations/activities in their homes. In the hilly areas of Uttarakhand females play a vital role not only in agricultural production activities but also in collecting the flora and fauna. Also there are a number of organisations like Mahila Mangal Dal working for the welfare of villages and conservation of local biodiversity.

The second main difference in the level of awareness is found to be more in urban students. This may be due to better and modern facilities available for them in comparison to the students living in rural areas. This gap can very well be narrowed down by the local panchayats which can organize discussion on the governmental programmes beneficial to the villagers so that each one is informed.

Conclusion

         To conclude it is to state that a number of schemes are brought out by the government specifically focussing on groups to benefit. Unless persons for whom the schemes are brought out, they may not be able to avail the benefits. Secondly, the general public should also be aware of the schemes so that they are able to disseminate the information to others, particularly the focussed groups so that the benefit goes to the persons really in need of. In this study Green India Mission is the central focus. The state like Uttarakhand can benefit a lot from this mission as it has vast forest cover and quite a good number of population lives from the forest produce. Unless they know well the benefits of this mission, they will not be able to avail at all or avail fully for their benefit. Students perusing B.Ed./ M.Ed. are the future teachers who not only transact lessons from the text books in the classes but also create awareness by discussing selected topics of interest to the learners. Hence, they are supposed to master not only in the subjects of study but also of general knowledge. In that sense the study taken and analysed in this article has revealed where our future teachers stand. Hence, it is high time that B.Ed. M.Ed. colleges tune to train the future teachers to deal with the subjects which are beneficial to the common folk who are outside the formal system of education.

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Mission for Green India, MGNREGA will converge to facilitate ...*http://articles. economictimes.indiatimes.com/2015-03-09/news/59931532_1_green-india-national-mission-afforestation*Mar 9, 2015 ... UPA government|; Narendra Modi|; Mission for Green India MGNREGA| ... Officials said the National Mission for a Green India (GIM) and the. *Accessed 25/1/201*

The National Action Plan on Climate Change and the Green India Mission.

Green India Mission (GIM) - Ministry of Environment and Forests www.moef.nic. in/division/introduction-22 The National **Mission** for **Green India** (GIM) is one of the eight **Missions** outlined under the National Action Plan on Climate Change (NAPCC). It aims at protecting; restoring and enhancing **India's** diminishing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

Teachers: A Beacon of Self Learning to Redefine Real Life Education

G. Sekar

"Tell me I forget, Teach me I remember, Involve me I learn"

- **Benjamin Franklin**

Learning is normally associated with the formal education in all the institutions. The formal education is important to get a degree and highly remunerative occupation to lead a comfortable life. The learning happens throughout one's life. It is a deliberate and voluntary act of the learner, because it enhances the understanding of the subject and the surroundings at large.

Getting a degree is a normal phenomena but understanding the subject, retaining the knowledge for the life, recollecting the subject and making use of the subject knowledge is possible only by learning and understanding the subject. Therefore, learning particularly self-learning becomes an important component in the process of education. Here the term education means a process of socialization. "Education starts at Womb and ends at Tomb".

In addition to the subjects taught in the class, the students are expected to study some additional courses, at their own will. The study of additional courses depends on the academic caliber and efficiency of the students. Most of the higher education institutions offer such additional courses. The advanced learners take advantage of such courses. Some institutions thrust the courses upon the mediocre and slow learners. They find it very difficult to cope with the demands. This article focuses the constraints faced by the students and suggests some remedial measures to make the students more comfortable with self-learning.

It becomes a fashion to talk about 'Self Learning' in all the walks of life. But, the feasibility in our society is a question. Unless the question is answered, self-learning at all the higher educational institutions becomes a mirage.

Socially and economically poor students, who opt to study in vernacular language in public schools, may find it very difficult to cope with the demands of self-learning. The students, who are not fluent in English, particularly hesitate to take any course to learn on their own. Even though the courses are optional, they have a fear of failure, to opt the self-study course. The students, who are fluent in English, often tease the students who fail to take any self-study paper. At times the authority forces the students to take some self-study papers to get a good name in the eyes of the public. Instead, such students may be permitted to take a course in vernacular language or in their own mother tongue. This system will remove the language fear in the minds of the learners by giving an opportunity to learn a subject on their own.

On February 12, 2017, I read an article in a regional newspaper. A speaker, after a lecture in English gave some time for question-answer session. Only a few girls asked some questions. At the tea time, some boys approached speaker and asked some relevant questions. The speaker asked the students the reasons for not asking the questions on the floor. With lot of hesitation, the students told the speaker that they were shy to ask question in front of the girls, because they might tease the boys if the language is not correct. This is the situation in some of the institutions.

Academic caliber of the students is another lacuna. The institutions seldom analyze the capacity of the learners before introducing self-learning system. Instead, the core subjects which would get the students gainful employment or develop the skills to become entrepreneurs may be given more importance. If the students are made aware that the bright future is related with the additional core courses along with the successful completion of their course, they may be motivated on their own to learn some more subjects. It can be achieved when the teachers have the bent of mind to help the students to choose the subject depending on their caliber.

The time availability of the teachers is very minimum. Their concentration is to complete the prescribed syllabus within the allotted time. The teachers do not have enough time to encourage the participation of the students in the learning process. Dr.Palanidurai (2016) rightly termed it as "Mechanical Engagement". The only available option to the institutions is to offer the self-study courses. This is possible only in the autonomous colleges. The involvement of the teachers in motivating the students in offering a student centered learning should be very high.

Social relevance of the subject was not properly explained to the students. When I was heading an educational institution, during my routine visit to the departments, I entered a class and couldn't find the teacher and the hour was meant for the Labour Laws. So, I asked a few questions about the State Act and the Central Act, the Acts and Rules, the mode of enacting the Acts of the State and Central. But surprisingly no one answered my questions. This shows that the teacher concentrated only on the Acts prescribed in the syllabus and prepared them for examinations. Further, the teacher did not have enough time to explain the aims, objectives and purpose of the acts. The students are also to be made aware of the way in which the knowledge of the laws can help the students in their career.

Are the syllabi framed to suit the demands and requirement of the industries and employers? Two aspects in this issue are ironically missing - one is the market survey about the skill required for the industry and the second one is on the market auditing of the syllabi (Palanidurai 2016). The syllabi, already approved may be modified based on the market auditing. In this, the students will be benefitted. If the syllabi of the courses is skill and industry oriented, the learners will take interest and choose the routine hours as well as they will learn the courses in depth on their own.

With great difficulty, the teachers allot some time for the class room interaction. The teachers guide them to interact purposely / purposefully. Very rarely the interaction becomes clueless. If this is avoided, the interaction will meet the purpose.

The students' seminars become a ritual in the absence of clear cut assessment patterns. It has to be done by a team of teachers. In the seminars the students ought to make mistakes in the language, in the presentation and in the content. It is the responsibility of teachers to point out the mistakes (of course without hurting the students) with the corrective measures. Any mistakes pointed out, without corrective measures will never serve purpose. On the other hand, it makes the students to lose interest in the seminar sessions. Hence, one part of self-learning is closed as far as the students are concerned.

In an occasion, I was invited to give a talk on a topic. Before I started my talk, casually I asked the participants about the topic, no one answered. Later, I came to know that the students were asked to sit in the hall, even without informing them the topic, about the speaker and relevance of the topic to their core subject. Who is at fault? How do we expect the students to be receptive? Is it not the responsibility of the organizers to orient the students in advance?

I have my own reservation, in using PPT for the class room teaching. It makes the work of the teachers easy. I observed, in a class, that some students took photos of the PPT in their mobile, they do not observe what the teachers tell and do not take notes. Frequently the students get a copy of PPT from the teachers. In the examination, they rewrite only the points given in the PPT. We have been talking about self-learning. I am not against the use of e-media in teaching. The mindset of the student community has to be changed.

The present system lost the good practices which were in vogue. Some decades ago, the college teachers used to give home assignments to the students. For example the English lecturers asked the students to write annotations. The students had to read the chapter thoroughly and wrote the annotations with a detailed content and context. This practice served two purposes - one is that the students referred many books or read the chapter in the book thoroughly to complete the home assignment and the second purpose is that the students were kept engaged in the late evenings, preventing them from wasting the precious time on non-productive activities. The new nomenclature is ERC – Explain with Reference to Context which has been seldom used. Why? The reasons are best known to the academicians.

The home assignment may be given by e-media. The students will study a topic at home by watching a video prepared by their teachers, in advance of their regular class and regular lesson. It provides an opportunity for the students to ask questions and perform practical activities under the guidance of their teachers (Dr. Anandakrishnan 2017).

Guided field visit is another self-learning method. This is not effectively carried out because of the lack of financial resources. However, field work, project based learning are advocated for the benefit of the learners.

After 20 minutes of continuous lecture assimilation falls off rapidly. Therefore the teacher may ask questions, then and there on the topic he has covered in the hour or he may reframe the concept into a statement, and ask the students whether they agree or disagree. The students can be selected at random to justify the answer. It can be inferred that the students who maintain neutrality might not have been attentive in the class or the lecture.

There is another way to bring back the attention of the students. They may be made to listen to the lecture, without taking any notes for 10-15 minutes and then asked to write the notes in their note books. The teacher at random, selects a student to read the note he/she has written. If the notes are found to be relevant, the lecturer may continue the lecture further or clarify the misunderstood concepts and then proceed.

At the end of the hour, the teacher may ask questions, which require one word answers. It is something like a subject quiz. This practice may increase the retention power of the students.

To make the class more interesting, teachers may talk about the relevant, related topics apart from the given syllabus, current affairs related to the subject, etc.

The teacher has to be a voracious reader and must have the habit of reading 'Newspaper' daily. Only when the teachers equip themselves to answer questions on the subjects, the students come prepared to the class to raise questions. At times, the teacher may not be in a position to answer a question raised by a student, and then the teacher can tell the student that he would get the answer in the next class, and the teacher ought to give the answer positively in the next class. This should not be a regular practice. Making the students to ask questions is a difficult task. Teaching-Learning will be effective only when the students ask questions/clarifications in the class immediately after the lecture hour.

Another method of Teaching-Learning is group discussion. The method is effective if the topic for the discussion is interesting on the current affairs and the students must know the concept clearly. In such case, the level of participation will also be high.

There are ways and means of making the group discussion interesting and fruitful. The teacher himself prepares a concept note with the contradictory views. For example, "Co-education: Pros and Cons". Some people are for Co-education and some others are against it. The concept paper should have both the views. Normally, if there is a dichotomy, the students will join with any one and argue to drive home their points. Here, the teacher, even though he prepared the concept note has to play the role of a moderator, and must avoid taking the sides.

In the discussion, the students are encouraged to relate their personal experiences with the concept given. That will be interesting to the other members of the group. Students may actively participate, to narrate their own experience, if they listen to the experiences of the members of the group.

In a group discussion, each member has to write the deliberations viz the points discussed, questions raised and answers given. At the end of the discussion, each member has to present a brief note on the deliberations to the members for editing, and the final report is prepared. This may be placed to a larger group, may be a class. Ideal strength for the group is eight to ten.

The case study is another method of 'student centric learning'. It is an in-depth analysis of the unit. In totality, the collection of data, relating to the subject of the study is required. It includes all the aspects viz social, economic, political, psycho dynamic. The data from all the sources are deliberately recorded. The data collected is dependent on a time frame. Therefore, the case analysis and reporting may be done within a time frame fixed.

The teacher may guide them to prepare the case study. I believe that the case study may be conducted in any field. If the unit for case study is a community or organization, the unit may be analyzed in all the angles, probable solutions are written and then the most appropriate one is selected. To write two or more solutions, the student has to read a number of research articles, to articulate with the experienced people. Here also, the students are made to learn on their own. At the same time, the teachers should think that it is a learning exercise and hence right answer to a problem under the study cannot be expected always. The learners will develop their ability to frame their thoughts in the categorical terms as they practice more.

Role playing is another student centered learning method, which is seldom used in the regular classes. It is more than a seminar or paper presentation. The student may be asked to play the role of teacher to take the class on a given topic. The class teacher may give the topic in advance, to orient the student on teaching methodology, and guide the student to prepare for a question and answer session. The class teacher must be present in the class to help the 'Student-Teacher'. Here the student teacher learns the subject in depth, at the level of answering any questions raised by the fellow students. While explaining the concepts, the student-teacher may have a new insight in the concept.

In the process, he gains the self-confidence to face a group of audience, improves the communication skills, understands the students' psychology, class room atmosphere (students' attitude towards the subject, their behavior etc). The student-teacher himself learns 'What to do' and 'What not to do' in the class which cannot be taught theoretically.

The right kind of questions opens the door to the participation of students. Once the concept is explained, the teacher asks a right question to the students

to know the level of understanding; then he may go for the second question to relate the concept with a current problem or the context and content. This type of provoking questions makes the students to think i.e. students learn to think on their own way according to the concept taught in the class room on the day. Little advanced process is to ask the probing questions, on the answers given by the students. In asking such probing questions, the teacher must also be very careful not to bully or tease.

To facilitate the self-discovery and self-appropriated learning, the teacher may share his opinion on the subject without any deviation and domination but with the mutual respect. This improves the potentiality of the learner. At times, the learner may not have an appropriate answer to the queries raised, the teacher may encourage and give chances to other students to give answers. Further the students may be motivated to relate the subject taught in the class with their personal experiences. If a group of students do this exercise successfully, the others also are inspired to analyze their own experiences which are relevant to the subject.

The teacher may give a question to a group of students; each one has to write the answer, referring the text book / reference book; each student has to display their answer on the board, in front of all the students. After a brief discussion the correct answer is pointed out and wrong answer is removed. The second question is given to the second group and so on. Dr. Anandakrishnan (2017) advocated collaborative learning, which encourages team work and mutual support.

The students are asked to contribute a popular article relating to their subject to the journal published at the departmental level. If the students can write article after analyzing the materials available, the practice will make them to read the subject in depth.

A set of leading questions may be given to a group of students to develop the concepts on their own way. The class may be divided into groups. In each group, one student may be given a topic, the student prepares and takes the class to his/her team members. This is made by rotation. Instead of teaching the subject in the class, the student may feel comfortable to talk to a small group. In due course, the students may develop the self-confidence to face a larger audience.

The text materials may be given to the learners individually in advance, with a set of questions and the required inferences for which the direct answers are not given in the text. Once the learner completes the question-answer session, they may share the answers/inference with other learners of their group for deliberations to find a correct answer or inferences. The correct answer or the inference forms the key for the questions raised and the key forms the basis for assessing the answers of the individual learner.

This can also be practiced in another way. One member of a group may share the answers with learners of other groups to compare the answers or inferences and come to a consensus. The work may be displayed as a poster so that the learners of the whole class may contribute to develop the answers or inferences. The students may clarify the doubts raised by the classmates. This practice may improve the creativity and communication skills of the students.

The learner himself may be permitted to evaluate his own test papers or assignments. The course teacher may give him the key to evaluate the script. This system not only makes the student to know the standard of the answers in the test or the assignments, but also makes them to realize the shortcomings. The student gets an opportunity to compare the work with other students. The teacher may help the student to get the correct answer and puts marks on the earlier version of the test paper. This system involves cent percent transparency and makes the student to correct his mistakes and learn the subject.

In the self-learning process, highly sensitive, and committed teachers who treat the students with love and affection, who have affinity, loyalty and identity with the institution are required. The learners require love, affection and recognition from the teachers but not the work pressure.

Some of the students are lethargic in attitude towards their own education. When one institution introduced self-study papers, the students were little hesitant to take the papers. The reasons could be that they are lazy or they had a fear or they may not have the confidence in themselves. The only way to overcome this problem is self-motivated, and well informed teachers. They can induce the confidence in the minds of the learners to overcome the initial fear, lethargic attitude and laziness. Once the students start learning a subject on their own, of course with the guidance of the teachers, they will continue to take up more self-study papers in the subsequent semesters.

The students may be given freedom to select the topic, subject and time to learn i.e. there should be a flexibility in these aspects. If the students are pressurized they may not like it and may not take interest in it. In case of seminars, the students have to select the method of presentation-oral, poster or ppt. If the method of presentation is thrusted on them without considering their limitations, the students may develop a tendency to skip. The students' seminars and assignments are considered as a criteria for marking in continuous assessment. It is the responsibility of the course teacher to put the utmost effort to evaluate the seminar presentation or assignments. The unbiased, impartial valuation will improve the morale of the students and motivate the students to take their work seriously.

The feedback on the self-learning of the students in terms of topics/subjects, time frame, evaluation methods have started getting importance nowadays. The in-depth, honest analysis is required on the feedback collected. The superficial analysis to satisfy the higher authority will not at all serve any cost or purpose. The

students are to be made aware of the purpose of the feedback, and oriented on the methodology.

In the self-learning process, it is presumed that it is the learners' work. But it is not so. In the learning process the teachers and learners are the two sides of the same coin. Here the teacher plays the roles of facilitator, guide and helper. In other words the teachers are the planners and the students are the executors. Ultimately the learners are the beneficiaries. They learn on their own. And it is explained well by the proverb, "Give the hungry person a fish, and then teach him to fish".

It is the responsibility of the teachers to arouse the interest of the learners in the subject. There were some topics, in MSW programme on the urban slums, tribal settlements, caste conflict and the like. The class of 25 was divided into five groups and the groups were given one topic each. One group was told to visit a tribal settlement, and observe the main features of the settlement and to submit the report. Really they did well. The students would not forget their experience in their life time what they learned. All the five groups presented their reports along with the photos in a common platform. This could be a better method than teaching theoretically such subjects in the class. The students enjoyed the assignment given to them. Another benefit in this method is that the students observed the phenomenon, and understood it, so they would not have any hesitation in answering the questions in the examination.

Role of the Teachers

- Teachers are the source of inspiration.

- The students academically may be average. The teachers are the best motivators; they should avoid de-motivating the interest of the students.

- The teachers have to update their knowledge, and take the students along with them in updation.

- The teachers have the duty/obligation to guide the students to learn the subject on their own instead of dictating the notes, giving handouts, giving a copy of PPT materials to the students.

- The teachers ought to give the objective feedback on the assignments and answer scripts to the students promptly.

- The teachers have to be gentle on the beginners, because they have a great potential to become experts. The students learn on their own, if they are treated gently and impartially. (The teacher should always remember that they should teach the students where the students have to go, not the teacher's agenda).

- The teacher should change the system oriented education into process oriented education. The teachers may focus their attention on "How to Learn", instead of "What to Learn".

- The teacher has to give opportunity to the students to develop on their own, and unearth their inherent potential.

- The teacher has to remember that each and every student has their own unique qualities. The role of a teacher is to identify the qualities and help the students in their development, as the student might not know his own capabilities unless it is put to test. So the teacher must give the students, the right platform, to test their own capabilities.

Conclusion

The students have to apply their mind and soul to be educated in the real sense. They should understand that the education is for their life. The Saint-Poet Thiruvalluvar stated that "*whatever is to be learnt should be learnt flawlessly so that the learning imbibed shapes one's conduct*". (Kural 391)

Here, in the lifelong education the role of teachers need not be re-emphasized, again and again. They are the beacon of the students.

Mediocre Teacher Tells, Good Teacher Explains, Superior Teacher Demonstrates, Great Teacher Inspires - William Arthur Ward

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Industry - University Collaboration to Promote further Learning Opportunities to Apprentices

V. Balasubramanian

University and industry have been collaborating for over a century, but the rise of a global knowledge economy has intensified the need for strategic partnerships that go beyond the traditional funding of discrete research projects. World class research universities are at the forefront of pioneering such partnerships. Designed to run longer, invest more, look farther ahead and hone the competitiveness of the companies, universities and regions. In short, they transform the role of the research university for the 21st century, anchoring it as a vital center of competence to help tackle social challenges and drive economic growth.

Growing skills gap and fierce competition for global talent have prompted some forward- looking companies to partnership with universities specifically aimed at modernizing teaching learning. The partnership becomes a ground breaking experiment in developing new skills for next generation workforce and a conduit for future recruitment of top talent.

Another groundbreaking approach involves partnerships that establish a multi disciplinary research institute in which industry researchers and academics pursue solutions to complex, systems-level problems that require cross-disciplinary expertise. The creation of high-profile multi disciplinary institutes can help break down traditional academic silos by creating incentives for new areas of research, seeding new courses of study and multidisciplinary degree programmes,

A new vision should include producing the highly skilled workforce for a globally competitive economy. The university in the 21st century should be viewed not just as a generator of ideas but as a source of knowledge and competence that can benefit society.

When Industries and Universities work in tandem to push the frontiers of knowledge, they become powerful engine for innovation and economic growth. Silicon Valley is a dramatic example. For over five decades a dense web of rich and long- running collaboration in the regions have given rise to new technology at breakneck pace and transformed industries while modernizing the role of the university.

Since founding Massachusetts Institute of Technology (MIT) has fostered a problem- solving approach by collaborating with over 700 companies. With regards to Entrepreneurship and Innovation at MIT, MIT alumni have launched 30200 active companies, employing roughly 4.6 million people and generating roughly $ 1.9 trillion in annual revenues.MIT has vibrant patenting, licensing activity with 800 new invention disclosures in the financial year 2016 and generating $62 million

in total license renewal fee. Bold and visionary partnership between industry and university can accelerate innovation and help deliver solutions to pressing social challenges.

Microsoft, Cisco and Intel have all had long-running individual programme to boost skills in the classroom, with the University of Melbourne." If Microsoft had chosen to do this work alone, it would had minimal impact, There was tremendous value in partnership" says Microsoft senior Director, worldwide education strategy and visiting Research Associate for School of Business Management, Open University of UK Mr. Greg Butler.

In a country the size of India with 29 states and 7 union territories, geographical spread of 3,287,240 square kilometers and a population of 1.3 billion, there are myriad interactions taking place at various levels. India has the third largest higher education system in the world, after the US and China, with more than 600 universities and over 35,000 colleges. The Gross Enrollment Ratio in higher education has increased from 12 percent till five years back to roughly 18 percent now. There are centrally funded institutes, state-run universities, state-legislated private universities and various autonomous institutes.

Industry Institution collaboration has been foreseen in various policy statements of the Government of India. During the preparation of the National policy on Education, a document entitled" Challenge of Education-A Policy Perspective" was prepared by the Ministry of Education which had noted that "The collaboration between Industry and technical institutions which is so crucial for ensuring relevant quality and cost effectiveness, subsequently the National Policy on education adopted by the Parliament in 1986 emphasized the need for collaboration.

The technology policy statements prepared by the Department of Science and Technology, in 1993 for widespread dissemination had emphasized the collaboration between Industries and Engineering Educational Institutions to launch programmes for training retraining industrial and technical personnel in numbers significantly more than what has been attempted hitherto.. Industries would be involved in this process of upgrading the human skills.

The Committee to set-up the Council for Industry and Higher Education collaboration (CIHEL) to facilitate Industry-Institute collaboration is indeed the way forward. Many students who venture into the corporate world aren't job ready. The Ministry of Human Resource Development has taken steps to increase their employability quotient. (Pallam Raju 2013)The current university education framework develops the students analytical, reasoning and logical skills but is unable to develop employability skills .So as to develop him/her in a position to find meaningful employment.

The National Vocational Qualification Framework (NVEQF) offer employment and provide an opportunity   to acquire a degree or Diploma...Skill

building can only be imparted by the industry. The MHRD also launched National Employability Enhancement Mission (NEEM) through AICTE to offer on the job practical training to enhance the employability of persons either pursuing his/her graduation/diploma in any technical field.

Exploring the strategies to overcome the skill gap and manpower demand Aqua group of Industries, Coimbatore initiated a joint venture in collaboration with Karpagam Academy of Higher Education - Deemed to be University (KAHE), Coimbatore in the year 2012 to conduct part time Bachelor Degree Course in Mechanical Engineering to their Apprentices who possess Diploma in Mechanical Engineering.

KAHE established under Section 3 of UGC Act 1956 is approved by Ministry of Human Resource and Development, Government of India. The President of the trust which formed the Academy is a philanthropist, industrialist, entrepreneur and culture promoter. The KAHE conducts arts, science, medical and engineering courses. It has excellent infrastructure, modern teaching aids, career oriented training, placements and well educated faculty members. Besides technical expertise, KAHE has made a mark for itself since its inception by developing communication and soft skills, enlightening knowledge, extending holistic education and creating a strong value system, Today, with a strength of 6000 students and over 750 teaching and non-teaching staff, KAHE is setting a new benchmarks in the educational sphere.

Aqua Group is the maker of India's most reliable pump brands, TEXMO and AQUATEX. It has different units – Aqua pump Industries, Aqua Sub Engineering Unit – I, II, III, IV, Aqua Sub Engineering Foundry – I, II, III, IV, Aqua Sub Engineering Wind Farm – I, II, III, IV, V and VI. With more than 3000 pumps manufactured per day. Aqua Group hosts a wide range of water pumps for the agricultural, commercial and domestic sectors. This group is the award winning manufacturer with captive foundry, motor lamination and winding wire units. Manufactured in Coimbatore, TEXMO borewell submersible pumps are India's most preferred due their consistent quality and robust design. The firm has earned favourable reputation in the Middle East, Africa, France, Germany and Japan.

Industry-University Partnership: Lessons from Successful Collaboration

Industry-University Partnership/collaboration is ongoing for the last many years both at international, national and local level. It may be difficult to enumerate all in this paper and hence, only a few are given below:

International Experience

a. Partnership to tackle application of modern biology to energy problems

The Energy Biosciences Institute (EBI) is a ground-breaking strategic research partnership created in 2007 to tackle the application of modern biology to energy problems. The main focus now is on developing sustainable next-generation

bio-fuels and reducing the impact of fossil fuels on global warming. Biosciences (BP) supports the institute with a 10-year, $500 million grant. Its partners are the University of California, Berkeley, the Lawrence Berkeley National Laboratory and the University of Illinois at Urbana-Champaign. The institute hosts 60 research groups including 129 faculty members and over 300 postdoctoral researchers and graduate students.

BP's desire to bring multiple disciplines to bear on the challenge of creating sustainable biofuels through the EBI forged a new academic field – energy bio-sciences – integrating biology, chemistry, engineering, environment, agriculture and economics. The institute combines a long-term research vision with a mission to drive step-change innovations that will pave the way for sustainable fuels. It covers the entire value chain, from crop selection and sustainable farming all the way to conversion of crops to fuels.

b.   Partnership to solve Real World Problems

Massachusetts Institute of Technology (MIT) since its founding has fostered a problem-solving approach that encourages researchers to work together cross departments, fields, and institutional boundaries. The resulting collaborations have included thousands of fruitful partnerships with industry and other leading research institutions.

MIT welcomes all industry partners who seek practicable and pragmatic solutions, and who share and celebrate the entrepreneurial spirit that brings new ideas to life MIT serves companies across the globe and is organized both geographically and by industry. Together, MIT and industry can make great progress in creating new knowledge, in shaping new leaders and in making important gains against the challenges of our generation.

National Experience

Ministry of Human Resource Development, Government of India brought out a report in the year 2013 in collaboration with the Confederation of Indian Industry (CII), examining how industry interactions are taking place at different institutes. In this report Indian Institutes of Technology (IITs)-- Bombay, Kanpur, Madras, Delhi and National Institute of Technology-Karnataka (NITK), Surathkal were selected for study. Many institutes have developed successful models which are industry-led and are driven by the actual requirement of the market.

a. Industry – IIT, Kanpur Collaboration

IIT-Kanpur has industry and institutional collaboration arrangements with a wide range public and private owned entities of research excellence. The institute has a large number of research engagements with the private sector, where the institute's faculty provide expert technical and technological research support in the form of operating models (simulation or prototypes), designs and analytics. Some of the notable industry partners include Moser Baer India Limited,

Boeing, Chevron Corporation (USA), Hindustan Petroleum Corporation Limited, Qualcomm Incorporated, Intel etc.

As a result of industry collaboration and active research, IIT-Kanpur was able to increase the number of patent filing in India by over 4 folds in the past 5 years. In addition to Indian Patents, the institute has also filed for 4 international patents and has contributed to 24 technology transfers after 2009 worth approximately Rs.67 lakh. A majority of the patents proposed by the faculty and students have been procured by Intellectual Ventures (IV) Ltd., a- Bangalore-based multinational company. In 2010, IIT Kanpur was the top source of inventions for IV India, both on invention volumes and filed patents.

District Experience (Coimbatore)

Karunya Institute of Technology and Sciences - Deemed to be University established in 1986 collaborated with governments, government departments, Industries and institutions at the local, state, national and international level for academic excellence in the areas of faculty exchange, students internship, research, etc. Some of the Industries and institutions are Ministry of Science and Technology and Innovation, Republic of Panama, Nanonics Ltd Israel, Raffles Academy, Singapore, IDBI, NSE-Mumbai, Microsoft Corporation India Pvt. Ltd, Salim Ali Center for Ornithology and Natural History for Research, BSNL, New Delhi, BVK Biosciences Pvt. Ltd. Hyderabad, Oracle India Pvt. Ltd, CISCO Systems SIEMENS Ltd, Mumbai, Robotics Institute of Technology Solutions Pvt. Ltd, Tata Elxsi Ltd, etc.

Origin of the Study

The author has been engaged as Consultant (Employees welfare) in Aqua Sub Engineering from February 16, 2017. Immediately after joining duty he started learning about the industry by meeting people, through discussion and from available written documents apart from visiting different sections and shop floor. One such a place he visited was the Aqua Group of Industries Training Center in which apprentice workers were undergoing technical course. He found it interesting to see teaching taking place in the premises adjacent to the production centre. During the discussion it was found that the industry recruits technically qualified persons (Diploma in Mechanical Engineering) as Apprentice and train them in various job related technical areas during which period they are paid Rs.9000/- as stipend. However, it did not stop with that as the company in order to enable its workers to pursue the path of progress by moving upward in their qualification also provides an opportunity to join in three and half years bachelor degree course in Mechanical Engineering in collaboration with KAHE. The duration of the course is of three and half years with 7 semesters. Those who join this course will be there in the company for five years not only with the stipend of Rs.9000/- but also with annual increment of Rs.500/-. The apprentice period and the course period is for four and half years and another six months the company helps to the students to get employment opportunities through referral services.

The author with 32 years of previous experience in the field of education and vocational training immediately decided to conduct a study about the programme and proposed the same to the Vice President (Information Technology and Finance), Aqua Group of Industries who immediately agreed to. Hence, the study was done. This article has been made out of the study report.

Design of the Study

The design of the study is descriptive in nature. A questionnaire was prepared based on the facilities available and challenges faced by the apprentice workers as students while undergoing part time B.E programme. At the time of the study 295 apprentice workers were undergoing B.E programme – 126 from 2014 batch, 94 in 2015 batch and 75 in 2016 batch. The total number of all the three batches came to 295 and hence, it was decided to cover all the students in the study. It is a census study by nature.

As a first step the author conducted an orientation programme to the students in which the author briefed them about the study. Then each one of the student was given a questionnaire to fill-up and the collected primary data was analyzed and the result given in the following tables:

Table - 1

Habitation-wise Distribution of Respondents

Batches	Rural	Urban	Total
2014	116 (92.06%	10 (7.94%	126 (100%)
2015	80 (85.11%)	14 (14.89%)	94 (100%)
2016	66 (88%)	9 (12%)	75 (100%)
Total	**262 (88.81%)**	**33 (11.19%)**	**295 (100%)**

Coimbatore is one of the 32 districts of Tamil Nadu which was ranked 7th place in Census 2011 among the highest population size of the state. It is not only the third largest city of Tamil Nadu but also the most industrialized cities of the state. It is known as the textile capital of South India or the Manchester of the South. The Census 2011 also revealed Coimbatore recorded 3rd lowest percentage of agriculture labourers to the total workers in the districts.

Though, Coimbatore is the most urbanized district with urban population of 26.19 lakh (75.73%) in comparison to rural population 8.39 lakh (24.27%), the Aqua group of Industries have provided more employment opportunities (Apprenticeship) for the persons with rural background (88.81%) in comparison to urban areas (11.19%) which is appreciable as most of the rural population are lacking livelihood opportunities.

Table-2
Caste-wise Distribution of Respondents

Batches	Backward Castes	Most Backward Castes	Scheduled castes	Other castes	Total
2014	89 (70.64%)	28 (22.22%)	5 (3.97%)	4 (3.17%)	126 (100%)
2015	63 (67.02%)	21 (22.34%)	7 (7.45%)	3 (3.19%)	94 (100%)
2016	58 (77.33%)	11 (14.67%)	4 (5.33%)	2 (2.67%)	75 (100%)
Total	**210 (71.19%)**	**60 (20.34%)**	**16 (5.42%)**	**9 (3.05%)**	**295 (100%)**

Caste demographics in India is indicated uniformly into four groups – Other Backward Classes, Scheduled Caste, Scheduled Tribe and others. But traditionally and for long Tamil Nadu followed the division into five categories – Backward Class, Most Backward Class, Scheduled Caste, Scheduled Tribe and others. However, in tune with all India classification the Backward and Most Backward Classes in Tamil Nadu fall under the category of Other Backward Classes. As per 2011 Census the Caste demographics of Tamil Nadu was Scheduled Castes (20.01%), Scheduled Tribes (1.10%) and Other Backward Classes (68%).

Table- 2 reveals that out of 295 respondents 270 (91.53%) belonged to Backward and Other Backward Castes while 16 (5.42%) SC and 9 (3.05%) other castes. This trend corresponds to the caste categories of the total population of Tamil Nadu.

Table-3
Age-wise Distribution of Respondents

Batches	Between 19 & 23 years	Between 24 & 28 years	Total
2014	85 (67.46%	41 (32.54%)	126 100%
2015	83 (88.30%	11 (11.70%)	94 100%
2016	73 (97.33%)	2 (2.67%)	75 100%
Total	**241 (81.69%)**	**54 (18.31%)**	**295 (100%)**

Table-3 reveals that out of 295 respondents 241 (81.69%) belonged to the age group 19-23 years which indicates that the respondents have become productive at a very young age. The remaining 54 (18.31%) was in the age group 24-28 years. It is clear that Aqua Group of Industries not only provides employment opportunities for the youth but also encourages and provides opportunities for them to pursue higher education while on job which is appreciable.

Table - 4
Qualification-wise Distribution of Respondents

Batches	DME (after completing Secondary/ Metric Level)	DPE (after completing Secondary/ Level)	DAE (after completing Secondary Level)	Total
2014	125 (99.21%)	NIL	1 (0.79%)	126 (100%)
2015	93 (98.94%)	1 (1.06%)	NIL	94 (100%)
2016	74 (98.67%)	1 (1.33%)	NIL	75 (100%)
Total	**292 (98.98%)**	**2 (0.68%)**	**1 (0.34%)**	**295 (100%)**

Aqua Group Industries provide opportunities for apprenticeship to diploma holders in engineering who come from different streams like mechanical engineering, production engineering and automobile engineering. However, the opportunity is more availed by candidates who are from the stream of mechanical engineering as the industries specialize in that field. As indicated in Table-4, out of 295 respondents 292 (98.98%) were Diploma holders in Mechanical Engineering (DME) while 2 (0.68%) were Diploma holders in Production Engineering (DPE) and only one (0.34%) was Diploma holder in Automobile Engineering (DAE). Hence, the decision of the management of Aqua Group Industries to start three and half years course in mechanical engineering is a well thought out decision and beneficial to those persons who join the industries as apprentice.

Table - 5
Educational Qualification of Parent of Respondents (Father)

Batches	Illiterate	Primary	Mid secondary	Secondary	Higher Secondary	Diploma/ Degree	Post Graduate	Father not alive	Total
2014	42 (33.33%)	16 (12.70%)	10 (7.94%)	25 (19.84%)	8 (6.35%)	4 (3.17%)	NIL	21 (16.67%)	126 (100%)
2015	37 (39.36%)	17 (18.09%)	9 (9.58%)	14 (14.89%)	5 (5.32%)	5 (5.32%)	1 (1.06%)	6 (6.39%)	94 (100%)
2016	20 (26.67%)	16 (21.33%)	10 (13.33%)	17 (22.67%)	5 (6.67%)	1 (1.33%)	1 (1.33%)	5 (6.67%)	75 (100%)
Total	**99 (33.56%)**	**49 (16.61%)**	**29 (9.83%)**	**56 (18.98%)**	**18 (6.10%)**	**10 (3.39%)**	**2 (0.68%)**	**32 (10.85%)**	**295 (100%)**

Table - 6
Educational Qualification of Parent of Respondents (Mother)

Batches	Illiterate	Primary	Mid secondary	Secondary	Higher Secondary	Diploma/ Degree	Mother not alive	Total
2014	61 (48.42%)	17 (13.49%)	14 (11.11%)	22 (17.46%)	6 (4.76%)	3 (2.38%)	3 (2.38%)	126 (100%)
2015	43 (45.75%)	21 (22.34%)	11 (11.70%)	7 (7.45%)	9 (9.57%)	NIL	3 (3.19%)	94 (100%)
2016	27 (36%)	15 (20%)	12 (16%)	14 (18.67%)	7 (9.33%)	NIL	NIL	75 (100%)
Total	131 (44.41%)	53 (17.97%)	37 (12.54%)	43 (14.58%)	22 (7.46%)	3 (1.01%)	6 (2.03%)	295 (100%)

Table 5 and 6 reflect the educational status of the parents (father and mother) of the respondents. The analysis clearly reveals that 60% of fathers and 74.92% of mothers studied only upto mid secondary (upto 8th standard) followed by 25.08% of fathers and 22.04% of mothers studies upto secondary/higher secondary. Both the tables also reveal that diploma/degree holders of father and mother were only 3.39% and 1.01%. Hence, most of the respondents were first generation diploma holders in their families and also became degree holders in mechanical engineering. This is a quantum jump in the educational status of the families.

Table-7
Source of information to respondents regarding apprentice job in Aqua Group of Industries

Batches	Placement by Aqua Group Industries in the Polytechnics	Friends and other sources	No opinion	Total
2014	49 (38.89%)	35 (27.78%)	42 (33.33%)	126 100%)
2015	43 (45.74%)	20 (21.28%)	31 (32.98%)	94 (100%)
2016	39 (52.00%)	7 (9.33%)	29 (38.67%)	75 (100%)
Total	131 (44.41%)	62 (21.02%)	102 (34.57%)	295 (100%)

It is not enough that service provider has all the facilities and the beneficiaries not know such facilities are available for them. In community development programmes this happens always with the result the beneficiaries who really need the services are out of frame and the facilities created are un-availed and go waste or availed by someone else who is not the real clientele. This is precisely the

reason, a question was posed to know from where the respondents got information regarding apprentice job available in Aqua Industries and also there is a facility to pursue further education through lateral entry in bachelor course. As shown in Table-7 majority of the respondents 131 out of 295 (44.41%) joined as apprentice in Aqua Group of Industries by the placement provided by Aqua Group Industries in the Polytechnic directly. While 62 respondents (21.02%) came to know about the availability of apprentice job and opportunities to pursue BE in Mechanical Engineering as part time from their, seniors, faculty members of the polytechnics, friends, family members, relatives, staff members of Aqua Group of Industries and KAHE and Job Melas conducted in Polytechnics by Aqua Group Industries.

It is surprising that 102 respondents (34.57%) did not give any information in the questionnaire they have filled with regard to the source of information they got about the opportunity. There is a possibility that people living in local area (Coimbatore and its periphery) know well about Aqua Group of Industries which not only manufacture quality motors and pumps but also conducts Volleyball Tournaments in which youths enthusiastically participate and hence, that would have motivated them to take apprentice job. Those who do web search for employment opportunities normally get information regarding placements. Respondents received placements In Brakes India, another famous company left the company as opportunity to do part time BE Mechanical Course along with job is available only Aqua Group of Industries. That may be an added attraction.

Table-8
Job-wise Distribution of Respondents

Sl. no.	Type of Jobs handled	2014	2015	2016	Total
1	CNC machine operator	26	21	21	68
2	CNC machine Operator-cum-Setter	21	13	5	39
3	Coil winding	4	1	1	6
4	Dispatch	2	1	1	4
5	Design And Development	5	–	–	5
6	Export	–	2	–	2
7	Fabrication	–	1	–	1
8	Foundry	7	8	15	30
9	Heat Treatment	1	3	–	4
10	Machine shop	2	2	8	12

11	Motor assembly	7	2	2	11
12	Metro logy	2	–	1	3
13	Maintenance	5	2	1	8
14	Pump assembly	3	1	2	6
15	Planning	6	5	–	11
16	Purchase	1	1	–	2
17	Pattern development	2	–	3	5
18	Product development	7	3	–	10
19	Press shop	5	5	7	17
20	Quality control	4	6	3	13
21	Service	3	3	–	6
22	Tool, Die making and maintenance	5	8	1	14
23	Time office	1	1	–	2
24	Vendor development	1	–	–	1
25	Welding	6	5	4	15
	Total	**126**	**94**	**75**	**295**

One can see from the above table the types of jobs handled by the respondents which include machining of jobs in various types of high-tech Computer Numerical Control (CNC) machines, welding, Coil winding, Motor and Pumps assembly, fabrication, quality control and inspection, marketing, dispatch, exports, service, planning, product design and development, trial follow-up, purchase, logistics, administration, foundry, EDP and TPM. The outcome of such a multiple handling of jobs the respondents can develop the skills in managing larger group of employees, time management, handling workload, attending minor and major repairs including break downs and preventive maintenance, reduction in rejection of components and rejection control, managing critical situations and find solutions, joyful working, importance of all the processes of production, product planning, production control, materials planning, materials management, materials moving, materials follow-up, sub-contract follow-up, handling vendors, possibility to increase productivity, planning in a big industry, product assembling

and quality plan, manpower control, safety and simulation programme, Purchase of raw materials, sourcing, grading and inventory control, knowing the functions of purchase department, marketing and EDP, new product development, trial follow-up, analysis of casting rejection, ISO work, files analysis methods and designing new machines at low cost.

The respondents also had an opportunity for live project work during 7th semester in the industries wherever they are placed. This is a unique opportunity for them to develop skills in invention and designing of new products and methods in production.

Table-9
On the Job Training in Industry – Views of Respondents

Batches	Able to understand theory & practical at early stage of work	Application of theory & practical knowledge in Industry (place of work)	Good experience gained in Industry for full 5 years	Job, B.E Degree, 5 years experience with stipend in one place	Any other	No opinion	Total
2014	40 (31.75%)	7 (5.56%)	45 (35.71%)	19 (15.08%)	11 (8.73%)	4 (3.17%)	126 (100%)
2015	28 (29.79%)	10 (10.64%)	17 (18.08%)	25 (26.60%)	8 (8.51%)	6 (6.38%)	94 (100%)
2016	29 (38.67%)	4 (5.33%)	15 (20%)	18 (24%)	9 (12%)	Nil	75 (100%)
Total	97 (32.88%)	21 (7.12%)	77 (26.10%)	62 (21.02%)	28 (9.49%)	10 (3.39%)	295 (100%)

As per majority of the respondents (257 out of 295 which is equal to 87.11%) B.E, programme offered by Aqua Group of Industries not only enables them to understand theory and practical at early stage of work but also they were able to apply the theory and practical knowledge in their in the industry apart from gaining good experience and a degree. Above all stipend during the apprentice period provides a lot of financial support also. They also indicated in response in the questionnaire that they have learnt values and ethics during the 5 year period of work and study. They liked the job as the company had good work environment, convenient timings with shift system and class timings for learning and supportive learning opportunities in the shop floor. Above all along with the job they could get a Bachelor Degree in Mechanical Engineering which they have never dreamt of.

Table - 10
Quality of Teaching Theory - Opinion of Respondents

Batches	Able to understand easily	Unable to understand	Total
2014	122 (96.83%)	4 (3.17%)	126 (100%)
2015	88 (93.62%)	6 (6.38%)	94 (100%)
2016	74 (98.67%)	1 (1.33%)	75 (100%)
Total	**284 (96.27%)**	**11 (3.73%)**	**295 (100%)**

The theory classes are taken by faculty from KAHE. From Table - 10 it is clear that 284 out of 295 respondents (96.27%) have opined that they could understand well theory as it was directly related to the job they were already doing in the industry, good teaching methodology followed by the teachers with the support of well prepared teaching aids. After every theory class was over short notes given to students became handy for reading, reinforcement and reference.

Of course, a small group of 11 respondents (3.73%) said that they could not understand theory properly in view of the subjects being taken by more than one faculty and the delivery system was very fast. This percentage found to be almost negligible.

Table - 11

Applicability of Theoretical Knowledge in Practical – Opinion of Respondents

Batches	Able to apply	Able to apply partially	Not able to apply	Total
2014	117 (92.86%)	5 (3.97%)	4 (3.17%)	126 (100%)
2015	84 (89.36%)	6 (6.38%)	4 (4.26%)	94 (100%)
2016	70 (93.33%)	3 (4.00%)	2 (2.67%)	75 (100%)
Total	**271 (91.86%)**	**14 (4.75%)**	**10 (3.39%)**	**295 (100%)**

Table-11 reveals that the majority of the respondents - 271 (91.86%) have opined that they were able to apply their theoretical knowledge in practical while a small number of 14 (4.75%) expressed their inability to do the same in full but only partially. However, 10 respondents (3.39%) have said that they were not able to apply at all.

Table - 12
Opinion of Respondents on Stipend Received

Batches	Sufficient	Not sufficient	No opinion	Total
2014	80 (63.49%)	32 (25.40%)	14 (11.11%)	126 (100%)
2015	63 (67.02%)	24 (25.53%)	7 (7.45%)	94 (100%)
2016	53 (70.67%)	19 (25.33%)	3 (4.00%)	75 (100%)
Total	**196 (66.44%)**	**75 (25.42%)**	**24 (8.14%)**	**295 (100%)**

All those who are engaged as apprentice in Aqua Group get a stipend of Rs.9000/- per month with Rs.500/- as annual increment. Hence, a question was asked about the sufficiency of stipend for which 196 respondents (66.44%) said that the amount received was supporting to pay tuition fee, meet the expenses towards food, accommodation and travel. They have also expressed happiness and satisfaction by stating that they were not a burden for the bread winners of the family who already find it difficult to both the ends meet. The stipend made them to feel it was pride for them to earn by working, stand on their own legs and which is the first step in their life to manage everything.

However, 75 respondents (25.42%) have told that the amount was not sufficient as they could not spare any money for the family. Around 24 respondents (8.14%) expressed no opinion on the sufficiency of the amount received as stipend.

Table-13
Opinion of respondents regarding their future plan

Batches	Employment in organized sector	Self Employment	Teaching profession after Post- Graduation	Others	Total
2014	35 (27.78%)	58 (46.03%)	6 (4.76%)	27 (21.43%)	126 100%)
2015	41 (43.62%)	39 (41.49%)	4 (4.25%)	10 (10.64)	94 (100%)
2016	33 (44%)	27 (36%)	3 (4%)	12 (16%)	75 (100%)
Total	**109 (36.95%)**	**124 (42.03%)**	**13 (4.41)**	**49 (16.61%)**	**295 (100%)**

Apprenticeship training provided by the industries to the technically qualified persons who are just out of the technical institutions is more to polish and sharpen the knowledge gained in the educational institutions where they have got course completion certificate. But life after apprenticeship period is more important as the persons with qualification and guided training need to choose career for their life. Hence, a projected question was asked with regard to the future plans of the respondents. As indicated in Table- 13, 124 out of 295 (42.03%) preferred to go for self-employment which is not only appreciable but also amply reflect the confidence gained during their apprenticeship. In fact, their choice of self employment shows that they would like to be employment providers rather than employment seekers. At the same time 109 (36.95%) respondents desired to take employment in organized sectors and a small number of 13 (4.41%) expressed their eagerness to pursue further study to take teaching job.

49 respondents (16.61%) did not give any specific plan or preference for their future. This may be due to indecisiveness. They are called 'fence sitters' and in course of time they may either go for employment or self-employment.

Conclusions

This study mainly focused on the gain of apprenticeship in Aqua Group of Industries and the opportunities provided for them to pursue further education when they were on job. At the end it revealed certain important aspects which are as follows:

1. Though, Coimbatore district is predominantly of urban areas, opportunities provided by Aqua Group of Industries have been availed mostly by persons from the rural background where the employment opportunities are not adequately available.

2.   Bifurcation of castes at the national level mostly of four categories – Other Backward Castes, Scheduled Castes, Scheduled Tribes and other castes. However, a few states in India have their own bifurcation. In the case of Tamil Nadu it has five categories – Backward Castes, Most Backward Castes, Scheduled Castes, Scheduled Tribes and other castes. Tamil Nadu predominantly has Backward and Most Backward Castes. The study revealed that 91.53% of the respondents belonged to Backward and Other Backward Castes which is appreciable. At the same time the coverage includes 5.42% Scheduled Castes also which again is appreciable.

3.   It is appreciable that 81.69% belonged to the age group 19-23 years which indicates that the respondents have become productive at a very young age. The persons in the age group 24-28 also were 18.31%. Grooming at young age is not only good for the persons individually but also for the nation as a whole as they will be an integral part of economic development.

4.   Around 98.98% of the respondents were Diploma holders in Mechanical Engineering. Hence, the decision of Aqua Group of Industries to start three and half years course in Mechanical Engineering for the apprentices while on job is a well thought out decision and will be of beneficial to them.

5.   Most of the respondents were first generation diploma holders in their families and also became degree holders in mechanical engineering. This is a quantum jump in the educational status of the families.

6.   65.43% of the respondents who have joined as apprentice in Aqua Group of Industries came to know about the opportunity available from the polytechnics where they were students or based on the advice given by friends, seniors, relatives and faculty members. However, 34.57% did not give any information about the source of information they have got. This percentage shows that better information system needs to be placed so that more number of persons avail the opportunity.

7.   The practice followed by Aqua Group Industries placing apprentices in different jobs will enable them to learn more than one skill which will go a long way to help them to get employment in the competitive job market.

8.   87.11% of the respondents were of the opinion that the Bachelor Degree Programme offered by Aqua Group Industries not only enables them to understand theory and practical work at the early age and stage of work but also they could apply theoretical and practical knowledge in the industry. Stipend given also gives a lot of financial support to pursue the course part time through lateral entry.

9.   The shift system in industries, part time BE classes, location of training

centre and hostels for out station apprentice workers found to be planned meticulously. The respondents found to be posted in three shifts and classes are conducted from 10.30 a.m. to 1:00 p.m. and 5:30 p.m. to 8:00 p.m. from Monday to Saturday to suit the working hours in different shifts. The students attend practical at KAHE laboratory from 10.00 a,m. to 12:00 noon and 6.00 p.m. to 8.00 p.m. once a week, according to their shift of work.

10.   Around 96.27% apprentices were appreciative of the delivery system followed by the faculty of KAHE as they could understand well and it was directly related to the job they were doing in the industry. However, 3.73% respondents opined that they could not understand theory properly in view of the subjects being taken by more than one faculty and the delivery system was very fast

11.   Around 66.44% of the respondents expressed satisfaction with regard to the sufficiency of the money paid to them as stipend as they were not burden to the bread winners who already find it difficult to meet the family expenses. However, 25.42% found to be not satisfied with the quantum of amount paid as stipend and another 8.14% did not give any opinion. Hence, the opinion of 33.56% (25.42%+8.14%) cannot be ignored as it is a good percentage.

12.   42.03% of the respondents preferring for self-employment as their future plan is quite appreciable. This is the recent policy of the Govt. of India to enable the youths to be employment providers rather than employment seekers. At the same time 36.95% respondents desired to take employment in organized sectors and 4.41% wanted to pursue further studies to take-up teaching jobs. It is quite appreciable that the training in Aqua Group Industries has given a lot of confidence in them to make a firm decision about their future plans.

Recommendation

1.   The experience of Aqua Group of Industries enabling the apprentices to acquire Bachelor Degree in Mechanical Engineering through lateral entry system is appreciable. But the number of persons benefiting is very small in comparison to the number of students coming out of technical/ vocational institutions after completing their diploma courses. Coimbatore is not only the district as a whole but also the city is a highly industrialized place with large number of big, medium and small industries. The success story of Aqua Group of Industries can be taken forward by others also, of

course it need not be only in mechanical engineering but in other streams of engineering subjects where the industries are strong.

2.   While appreciating more number of backward and most backward castes availed the opportunity provided by Aqua Group of Industries, it may be essential to increase the coverage of Scheduled Castes and Scheduled Tribes as they are still not able to reach the desired level of the position in the social hierarchy. Better education and employment can facilitate them moving up in the ladder.

3.   Though, at a very young age the apprentices have got work experience in the organized industry but also could acquire a degree in engineering while on job. It may be appropriate they are given hand holding after the training so that they become successful in choosing proper career in the competitive employment market. Also for those who desired to be self-employed may require entrepreneurial skills which should also be taught as part of curriculum when they undergo the course in engineering or a standalone short term course after completing the engineering course.

4.   The Aqua Group of Industries may like to give little more publicity to the apprenticeship programme and the facility available for bachelor degree course in engineering through lateral entry as at present it has only limited way for the students to know about the opportunity. Enlarging the scope of information may bring in much more committed students into the system.

5.   Though, a small percentage of respondents opined about the difficulty in understanding the subjects taught in the classroom due to the subjects being taken by more than one faculty and fast delivery system, it cannot be ignored. The ultimate aim is to make everyone joining in the course complete the same successfully. Hence, it may be appropriate to discuss with the specific faculty who seems to be following fast tract mode so that they understand and appreciate the difficulties faced by the respondents in the classroom for rectification.

6.   Though, majority of the respondents appreciated the sufficiency of stipend they received during the apprenticeship, quite a good percentage expressed the insufficiency also. In case, it is really a difficulty then the problem needs to be addressed immediately. In case, the apprentices consider the stipend as salary, then also they need to be convinced to understand better so that they come out of their mental pressure.

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Gender Resource Centre: Empowering Women in Urban Slums

Mandakini Pant

The Context: Urbanization, City Slums and Women

Urbanization is a process characterized by more and more people living in the urban areas. In India, the urbanisation process has accelerated unprecedentedly in the past few years. The total urban population in the country as per Census 2011 was more than 377 million constituting 31.16% of the total population. By 2039, 50 per cent of India's population would begin to live in urban areas (projections based on UN World Urbanization Prospects). (NIUA, 2011)

A population boom, associated with rapid and unplanned urbanization, has led to a proliferation of informal settlements without durable housing, secure tenure, sufficient living area, adequate provisioning of basic services such as safe and affordable water, sanitation, drainage, electricity, and solid waste management. The slum dwellers experience varying degrees of deprivations due to residential crowding, environmentally hazardous living conditions, inadequate access to educational, health, social and legal services, low income opportunities and scarce basic services. They are continually being exposed to the risks of social fragmentation, exclusion and violence. (Nolan, Laura, 2015)

Delhi has urbanization level of 97.50%. (MoUD, 2016) The phenomenal population growth is predominantly a result of large scale migration. The bulk of the migrant population coming to Delhi is from the northern states of India such as Uttar Pradesh, Haryana and Bihar. Poor people migrating to Delhi in search of livelihood generally find employment in the informal sector where there is no access to secure work, social security benefits such as welfare protection, representation or housing. Most of these migrants land up in slums including unauthorized and resettlement habitations in Delhi. Due to the unplanned nature of habitations, basic service provisioning like health, education, skill development have been inadequate.

Men and women experience urban slum dwelling in different ways as a result of gendered constraints and opportunities (in terms of access to income, resources and services).Widely pervasive patriarchal attitudes affect their access to paid work (inclusion in or exclusion from certain kinds of work), health, education and legal services as well as resources or information to enforce their rights to safety and dignity. The gendered belief systems perpetuate and condone violence against women and girls. The violations of legal rights get exacerbated by women's lack of awareness about their rights as well as barriers to accessing their rights within family, community and the workplace.

Conditions of women and girls living in Delhi slums are particularly

precarious. Adverse sex ratio of girls and it declining trend in Delhi, low female work participation rate, high incidences of violence and crime against women, disturbingly high prevalence of anaemia amongst women along with other areas of vulnerabilities such as RTI/STI TB, reproductive errors, protein malnutrition are some of the challenges that need to be addressed on priority basis to make the city more women friendly.

While central government has taken many steps and policies to ensure better women participation, state governments have also done their part to ensure women empowerment. Establishment of Gender Resource Centre (GRC) is one such step taken by the Government of NCT of Delhi[1] in this direction. Government of NCT of Delhi under the Plan scheme -"Bhagidari: New Initiatives in Social Development"[2] launched project *Stree Shakti* to empower women, especially those belonging to the economically weaker section of the society living in slums. To achieve the objective of the Project Stree Shakti, two intervention mechanisms were planned viz, *organising Stree Shakti Camps* and *establishment of Gender Resource Centres* (GRCs).NGOs were identified and selected to take on GRC essentially to address holistically all the above dimensions of women empowerment. The Indian Adult Education Association (IAEA) was one of the many NGOs selected in 2012 to undertake a GRC-Stree Shakti Suvidha Kendra (SSSK) at Kirti Nagar, Delhi North District.

The case study, '*Gender Resource Centre: Empowering Women in Urban Slums'*, is primarily about community education practices of IAEA towards empowering women through GRC-SSSK at Kirti Nagar, New Delhi as per the plans and funds provided by the Delhi government. Section II *Stree-Shakti: Women Empowerment Initiative of Govt of NCT Delhi* highlights the empowerment initiative of Govt of NCT of Delhi towards addressing issues of women empowerment in urban slums. Section III *Community Education Practices* specifically looks at IAEA's initiative towards empowering women living in slums through GRC. Section IV *Impact* examines impact of GRC-SSSK, Kirti Nagar on women empowerment in terms of their agency for improving their well-being and taking steps to bring about positive changes in their lives. Section V *Conclusion* draws key lessons from the case study.

Stree-Shakti: Women Empowerment Initiative of Govt of NCT Delhi

The Government of India had declared the year 2001 as the Year of Empowerment of Women for the benefit of women in India. The Government of NCT of Delhi, recognizing the multi-faceted and multi-dimensional problems of the marginalized urban women in slum clusters, launched the initiative *Stree Shakti* (Power of Woman) in the year 2002 under the Plan scheme -"Bhagidari: New Initiatives in Social Development". The project *Stree Shakti* aimed to empower women, especially those belonging to the economically weaker section of the society. It was an integrated capacity building project through 'Bhagidari' (partnership) with NGOs to strengthen the ability of women to participate equally

in the mainstream of society. The project focussed on reaching out to poor women and providing them, social, economic and legal empowerment, through access to healthcare facilities, non-formal education, vocational training and awareness on legal issues. The Social welfare Department of Delhi Government implemented this programme from 2002 to 2007.

The Stree Shakti Camps were organized to achieve the objectives of the Project Stree Shakti. This camp approach was different from the conventional approach where members of the target group would reach the institutions/ programmes; here institutions/programmes reached the target group at almost their doorstep within a period of two years. One day Stree Shakti camps were held all over the NCT of Delhi, closer to the communities, nearer to the target group. The primary focus of this program was on women's health. The programme evolved over the years with lots of innovations. Later it became a holistic programme for economic and social empowerment of women in slums. Establishment of Gender Resource Centres (GRCs) was a sequel to Stree Shakti Camp Programme. It was a shift from the Camp based approach to a permanent set up based approach to give it more stable and permanent look. The GRCs became the central focal point for all issues relating to the empowerment of women concerning health, literacy and income generation.

In the year 2008, Govt of NCT of Delhi initiated *Samajik Suvidha Sangam* also known as *Mission Convergence* as a single window facilitation centre for delivery of welfare entitlements to the urban poor. The focus was on women and reaching out to families through women. The *Stree Shakti- Suvidha Kendras (SSSKs)* were created and attached to GRCs to mobilize and enrol women under different schemes and services including Self-help Groups. The GRCs were envisaged as interface between people and government, taking services to community doorstep and bringing awareness about governmental schemes and programmes.

The Delhi Government sought to partner with NGOs active in the field of gender and women's rights in order to strengthen its women's empowerment initiatives. The collaboration with NGOs was significant in terms of scale and impact. Sharing of power and authority with NGOs demonstrated a new model of GO-NGO collaboration. Under this model NGO's were selected to establish and maintain GRC and SSSK that would act as inter-face between service providers and the community members. More than 120 local NGOs became partners and served as extended arms of government for mobilizing people at grass roots to avail pensions, and other social security schemes, besides undertaking a range of activities within the community relating to education, health, vocational trainings, and building of legal and social awareness through GRC-SSSK.   IAEA was selected in September 2012 to manage one GRC-SK Kirti Nagar at Delhi North District. This GRC covers slum clusters of Furniture block, Chuna Bhatti, Jawahar Camp, Sanjay Camp, Mansarovar Garden, Ramesh Nagar, and Wadhwa camp.

The Mission Convergence and Gender Resource Centers, which were launched by the Congress government in 2008, have of late been abruptly discontinued by orders from the current ruling AAP Govt. Consequently, GRC-SSSK Kirti Nagar at North District Delhi under the aegis of IAEA ceased to function from 2016.

Community Education Practices: Programme, Process and Methods

Programme

The IAEA's community education practices emphasised nurturing rights-bearing citizens who can articulate clearly their concerns and priorities; access resources and opportunities; and with increased capacities make strategic life choices to reduce their vulnerabilities. It worked towards expanding people's capabilities through information dissemination, awareness raising, building capacities and practical skills. Its community education initiatives through GRC-SSSK Kirti Nagar, Delhi aimed to make women change agents by (a) generating awareness about their economic, social and legal rights ;(b) helping them to avail the benefits of welfare schemes of Govt and (c) enabling them to get access to services and facilities under the Mission Convergence of Govt of NCT Delhi.

There are many aspects to empowerment of women in urban slums, all of which are interlinked viz. *economic empowerment*, i.e. appropriate skills, capabilities and resources and access to secure and sustainable incomes and livelihoods; *social empowerment*, i.e. a process that helps people gain control over their own lives, being able to act on issues that people define as important for their lives; *political empowerment*, i.e. the capacity to analyse, organise and mobilise, participate in collective action for change, related to empowerment of citizens to claim their rights and entitlements; and *legal empowerment*, i.e., the ability of women and disadvantaged groups to use legal and administrative processes and structures to access resources, services, and opportunities. The programme activities of the IAEA through GRC-SSSK Kirti Nagar focused on *economic empowerment* through vocational training courses to women and financial reliance through SHG Formation; *social empowerment* through non–formal education and literacy, health & nutritional awareness, advice and services; and *legal empowerment* through legal awareness , advice and services; *information sharing* of key development schemes and services to facilitate poor women's access to services and entitlements and *celebration of special events* to foster a sense of community and national solidarity.

The IAEA followed *Bhagidari* (public-private and community partnership) model emphasising collaboration of GRC with all the state Government Depts. / Agencies concerned with women issues, legal, health, vocational and educational experts. GRC-SSSK programme team comprised of chief functionary from IAEA; project coordinator, programme officer, 2 community mobilizers, 1 SHG mobilizer and 1instructor for non-formal education and 2 vocational instructors. Services of medical practitioners, viz General Practitioner, Gynaecologist, Paediatrician,

Dentist, Ophthalmologist and Cancer specialist & nutrition experts; para legal advisor recommended by DLSA (Delhi Legal State Authority) were taken to implement health, nutrition and legal awareness programmes.

Education Process

(i)Setting the programme agenda within community

The community mobilizer began the process of developing a shared understanding about broad perspective and objectives of women empowerment programme by identifying and organizing the disadvantaged marginalized women from SHGs around their unmet priority needs and sharing with them about empowerment programmes through GRCs, which would address their prioritized unmet needs and transform their lives positively.

(ii) Eliciting Participation and Conscientization

The community mobilizers initiated dialogue with women both individually and collectively with SHG members to reflect on their problems, understand their learning needs and goals, and finding ways to change their problem situation. When women participated and reflected on their situation and gained knowledge about the existing oppressive reality, community mobilizer motivated them to participate in empowerment programmes through GRCs and also be informed about the govt development schemes and services.

(iii) Educating Women

Stree Shakti camps were organised to generate awareness through information dissemination on health, nutrition, legal rights and vocational opportunities. Structured programmes like non formal education and vocational educational programmes focused on building literacy and entrepreneurial skills. Essential information sharing and celebration of national events were other ways to reach out to women and educate them about important issues. Highlights of ways to educate women from 2012-2015 are elucidated below.

(iv) Awareness Camps

(a) Food and Nutrition Awareness camps

Awareness camps were organised for women. Nutritionists gave talks on the need for nutritious food for pregnant and lactating women, growing children and elderly people, balance diet, importance of vitamins and calcium and menstruation. Demonstrations were given on the ways to prepare cost effective food. 39 camps were organized in different slum clusters. Total 1258 women participated and benefited.

(b) General Health Camps

Eye check up camps were organised from time to time at different slum clusters such as Kamla Nehru camp. Out Patient Department (OPD) was organised

at Bal Vikas Kendra, Kirti Nagar for the period of 18 days to bring health care services at the doorstep of the community people. OPD services focused mostly on women, children and the aged. Key services rendered through OPD included diagnosis of disease, free distribution of medicines, referral to big hospitals, and counselling by specialised doctors viz, Gynaecologists, General Physicians, Paediatrician, Dentist, and Ophthalmologist on common ailments and preventive measures. Total 33 such camps have been arranged for the community. About 3614 community residents attended general health awareness camps and 4015 community residents benefited from the services rendered through OPD.

(c) Water and Sanitation Awareness &Training Camps

About 47 water and sanitation awareness programmes were undertaken to provide information on preserving water, water sources, personal hygiene and environmental cleanliness. About 23 water and sanitation training programmes were given to group of people on personal hygiene and hygienic food preparation, purification of potable waterwho in turn organised water & sanitation awareness training programmes for the community people. *Sehat Ka Paigam* was used as a resource book. About 8492 community residents attended the camps to benefit.

(d) Dengue Awareness camp

To generate awareness on Dengue epidemic awareness camps were organized where doctors were invited to give talk on causes of dengue and ways to prevent it. GRC functionaries and vocational course trainees participated in awareness rally to spread information on deadly dengue and its preventive measures. University students on their field visit to the community organised *Nukkad Natak* (Street Plays) to generate awareness.

(e) Vocational Opportunities Awareness Camp

A *Career Mela (Fair)* was organised under the Scheme of Swarna Jayanti Shahari Rozgar Yojana (SJSRY). Leading agencies viz., Intelligent Communication Systems India Ltd (ICSIL), DAV-ITC, Indian Cellular Association, and Vandana Luthra Curls and Curves (VLCC) shared information on career opportunities.

(f) Legal Awareness Camp

Total 57 Legal awareness were organised with the help of Delhi Legal Services Authority (DLSA)[1] and legal experts to generate awareness on various legal issues such as IPC Sections 498(a), 406, corruption, right to information (RTI), domestic violence, sexual exploitation, human trafficking, rape, child labour, female foeticide, and child marriage dowry, sexual harassment, self-defence, Labour Acts, laws for the care of old people, and protective Laws for common people to take legal course. Advocates designated by DLSA provided legal counselling in 8 centres. Total 3460 women attended legal counselling and awareness camps.

(v) Structured Programmes

(a) Vocational Skill Training Programmes

Vocational Skill Training programmes were conducted on cutting and tailoring, beauty culture and hair care. Till date total 425 women and girls have benefited from the vocational courses. JSS[1] Peeragarhi conducted examination for both the courses. Successful beneficiaries were given certificates of participation. An orientation programme for vocational trainees was undertaken on use of waste clothes and materials to prepare decorative items.

(b) Non -Formal Education Classes

Non-formal education classes for school drop outs, remedial classes for non-literates women and girls above 15 years and adult education for women and girls were launched. Basic Literacy Programme for 6 months duration was started. Women were taught basic literacy primer *Meri Kitab* prepared by Jami Milia Islamia. Towards the end of year women's progress was evaluated. National Institute of Open Schooling (NIOS) provided learner evaluation and certification. Total 325 beneficiaries benefited from this programme.

(vi) Information Sharing

GRC-SSSK Kirti Nagar also acted as information help desk to facilitate community residents to understand, enrol and avail entitlements of welfare schemes of the various Departments covered under Mission Convergence.

Door-to-Door survey for *Anna Shree Yojana* was conducted to (a) identify the most vulnerable categories amongst *Above Poverty Line families* who were not getting subsidised ration, and(b) to transfer Rs 600 per month/ per household through electronic transfer in the account of women who headed the families. Identification was done through Aadhar cards, voter ID cards and Ration cards. Total 218 bank accounts were open.

Enrolment drive for *Pradhanmantri Jan Dhan Yojana*[2] was undertaken. Around 3600 people opened bank account. Enrolment drive carried out for *Pradhan Mantri Jeevan Evam Suaksha Bima Yojana*[3] resulted in getting more than 300 people enrolled for the scheme.

Community residents in various slum cluster attended information talk on GoI sponsored *National Food Security Programme.*[4] Total 105 forms were distributed to avail the benefits of the schemes. Total 13467 people benefited from the information on schemes.

(vii) Celebration of Events

Special events were celebrated viz., World Water Day, Global Hand Wash Day, World Toilet Day, World Malaria Day, World Environment Day, Republic day, Independence day, Holi / Diwali, Teachers day, and Gandhi Jayanti. Lectures,

seminars, rallies, drawing and painting competition, group discussion, quiz, street plays and cultural programmes were organised to create awareness on crucial issues and foster a sense of community feeling.

Community Education Methods

The community education practices were located in empowerment paradigm to facilitate women to express and communicate their concerns clearly, decide and act on their concerns and priorities. IAEA, to fulfil Delhi Govt's mandate of women empowerment through its Mission Convergence programme, adopted following methods.

i.   ***Face to face dialogue*** with women in slums facilitated reflections and sharing of needs, opinions and expectations.It was through iteration of listening, hearing and speaking that trust was built and sense of a shared mission towards empowerment programme was created.

ii. ***Camps***as open public awareness meetings served the purpose of disseminating information and providing health services. Discussion took place around the issues of relevance to the community.

iii. ***Counselling*** (usually one-on-one) from legal and vocation expert facilitated personal decision-making. The content of the counselling varied according to the client's problems or concerns and her individual circumstances.

iv. ***Structured non formal learning situations*** ensured access to education, eradicated illiteracy among women and improved their access to vocational training, and continuing education.

Impact

Women reported a number of qualitative changes in their lives under the GRC-SSSK project, which could be deemed as empowering. Changes like improved self-esteem and self confidence, increased participation in household decision making, enhanced articulation, knowledge and awareness on health, nutrition reproductive health, law and literacy, and participation in economic activity may be seen as challenging deep-seated social norms and being truly transformative.

Social Empowerment

Literacy skills brought the cognitive and behavioural changes in women. They were initially reluctant to attend NFE programme. *'Why study'? Now at this age? What would I do?* ... were some of the resisting remarks. But when on insistence of community mobilizers, they came to NFE centre and were exposed to the world of words, expressions, their life changed with improved self-esteem and self confidence. They motivated other women to come to NFE centre to learn reading, writing and simple calculations. They are using their skills to write provision list, read scrap of papers and bus numbers. They have internalized the importance

of education and are sending their children including daughters to school as well as monitoring their progress in school.

I came from village to Delhi to join my husband here. I was neither educated nor did I have city etiquettes. I lacked self confidence. I did not have the courage to face the dazzle of mega city like Delhi. I would remain confined to my home. My husband would ridicule me most of the time as I was dependent on him for very thing. As I was illiterate my husband and my children accorded me no respect. My husband did not heed to my opinions and suggestions. My children just did not take me seriously. I was very uncomfortable with inadequacies and wanted to take steps to change myself. Ever since I joined GRC NFE centre, on insistence of community mobilizer from IAEA, I began to feel and see qualitative difference in me. I learnt to write my name. I cannot forget the thrill of being able to write my name...I used to put thumb impression always ... Familiarity with words and numbers boosted my morale high... Today I can go anywhere on my own... read the bus no ... dial the telephone number to talk on phone... I now run a small grocery shop in my area independently, making significant contribution to meet household expenses. . The attitude of my husband and children changed. They respect me now. They listen to my opinions on important household issues.

Interview: Kamlavati, married, age 36 years, Chuna Bhatti, Kirti Nagar (Source: IAEA: GRC Case Studies)

I was married to a driver who was educated up to class X. As I was illiterate my husband hesitated to take me out. He was an alcoholic and would and beat me every day. This was a daily ritual. I had accepted such violence as part of my destiny. One day he committed suicide. I was alone with no source of income. I had the responsibility of bringing up with three children. I started working as domestic maid doing sweeping, swabbing, washing utensils and clothes. I used to curse myself for being illiterate. One day I saw a woman in my neighbourhood going out with a notebook. I asked her if she was studying. She said that she goes to NFE centre to learn to read and write. I decide to join NFE centre. Every day after work I would come to NFE centre to learn to read and write. It was very difficult for me to do so because I was working at 10 houses as housemaid, I would be very tired by the time I finished working. Yet I was determined. I wanted to study at any cost. I would go to NFE centre at a time when remedial classes for children were going on. I am grateful to my instructor Susheela madam, who taught and paid extra attention to me. Now I can read, write and do simple calculations. Today I am working in a municipality school with responsibility of distributing school uniform and stationeries. I am leading my life with dignity. Economically I am doing fairly well compared to the times when I was totally dependent on my husband.

Interview: Savita, widow, age 30 years, Reshma Camp, Kirti Nagar(Source: IAEA: GRC Case Studies)

Economic Empowerment

GRC-SSSK programme on vocational skill development training in tailoring and beauty culture widened income generation opportunities for women. Incomes have increased. Self-earned income has instilled in them a sense of pride and confidence of managing on their own. Their bargaining and decision-making power within the family has increased.

My husband works in a private company earning about Rupees 6-8 thousand per month. But this meagre income is not sufficient to meet expenses related to daily household subsistence needs,   children's education and house rent etc. I joined GRC programme on vocational education. I took up six month course on stitching and tailoring. Generally one has to pay for tailoring course, GRC did not charge anything for this course. Equipments like stitching thread, needle and sewing machine were provided for free. After completion of course I started tailoring business from home stitching clothes for neighbourhood women and children. Now I earn about Rupees 4-5 thousand per month.

Sunita Devi, married, 29 years (Source: IAEA: GRC Case Studies)

I am a married woman, mother of three children. I had always wanted to learn, earn and gain social standing in society. But extreme poverty at home prevented me to fulfil my dreams. When GRC community mobilizer explained to me about the services provided by GRC, my dream found wings. I did 6 month course on beauty culture from GRC. I opened a beauty parlour at home. It was named Sheetal Beauty Parlour.   My husband supported in my new endeavour. As the number of clients increased, I moved to a rented room at Sudarshan Park. My work and income expanded. Today I am offering training to girls in my beauty parlour. While big parlours provide training to girls charging Rupees 5-10 thousand, I am offering training charging only Rupees 200/ from the students. The programme has enhanced my self esteem and respect in the society. Today I am able to provide my children good education and quality life. It is said that boys and girls are equals but do poor girls get the opportunity to move ahead in their lives? GRC has fulfilled my dreams.

Kamlesh Devi, married, 32 years (Source: IAEA: GRC Case Studies)

Legal Empowerment

Only when women understand the law in the context of their social and economic position can they use the law as an instrument for empowerment which may mean many things such as having a sense of security and vision of a future, the ability to earn a living independently, increased decision-making power in the household, mobility and visibility in the community, and the ability to participate in nonfamily groups.

Legal empowerment initiatives under GRC project aimed to give women the confidence, information, training, and assistance. It intended that women would

apply these skills in protecting their legal rights and entitlements.With increased legal awareness and support women were able to come out in the open to fight against domestic violence, dowry and other forms injustices.

... We were leading a peaceful life till a family, comprising husband and wife, moved to our neighbourhood. The family would always fight and create problems for others. We kept quiet and did not raise voice against them thinking that this was family's way of living. One day man from that household entered our house in a totally drunken state and started molesting my 23 year old daughter. We were scared. We still remained quiet and did not take action against the family. One day I shared my problem with GRC mobilizer. She advised me to come to the GRC and meet the advocate for advice. The advocate decided to talk to the family. The wife of that man personally came apologised for her husband's behaviour and assured that they would leave the house immediately. But this did not happen. I went to GRC again. Then the advocate wrote a letter to SH0 (station House Officer) and asked me to go to the police station. She explained to me what and how I should talk to police officer in-charge police station. I followed her advice. Police came to our slum, made enquiries about the family and warned the family to behave. But the family did not leave the place and kept harassing us. I did not lose hope. I kept making complaint against the family at police station. Finally the family under pressure from police decided to move away from the slum. Now I have become messiah of my locality. My legal success in my efforts against the family has restored people's faith in the legal system. I have become voice of all those women in my locality who suffer cruelty silently out of fear and of shame. I gained confidence because of my orientation and training in GRC. It is essential that Govt opens more such legal aid centres for to empower women legally.

Interview with Damyanti Devi, A-508 Harijan Camp, Kirti Nagar(Source: IAEA: GRC Case Studies)

*   I am Kusum. My husband, Lal Bahadur, works in a factory. We have four children. Two years ago my husband, on the pretext that I should be staying in village for some time, left me in our village in Bihar. Later he married another woman. Despite my continuous and pleading telephonic calls to him that I want to be with him in Delhi,   he did not bring me back from village. Finally I mustered courage to come on my own to the city. I found that he had remarried. When I protested he began beating me. One day he registered the house in his second wife's name and turned me and my children out of the house. I had no place to live and no support to look after me and my children. I started working as a domestic help. One day near our slum dwelling GRC was holding a meeting with some women on the issue of domestic violence and ways to address it. After the meeting I went the advocate and shared my case with her. She asked me to come to centre and wrote down my case. She sent GRC mobilizer to make enquiries. When she was convinced that I was telling truth, she decided to take steps to give me justice. She asked my husband to come to GRC and advised him to pay for my maintenance and take responsibility of his children. Initially he gave excuses that*

he was poor and was unable to take our responsibility. The advocate warned him that he has already taken an illegal step by marrying again and if he refuses to take responsibility of his first wife and children then he may have to go to jail. She took a written undertaking from him. He has agreed to pay for my maintenance and since then he hasn't harassed me. I continue to work as domestic help. I am grateful to GRC for giving me a new lease of life. I have learnt that we need to fight for our rights. I keep advising other women in my locality, who are also victim of domestic violence, for taking legal aid for justice.

Interview, Kusum, 8/35, Jhuggi no 420, Kirti Nagar(Source: IAEA: GRC Case Studies)

Conclusion

The project GRC-SSSK aimed at an inclusive and gender specific growth. This programme brought into its fold poor women from slums, unauthorised and resettlement colonies providing them, social, economic and legal empowerment. It adopted a convergence mission approach with horizontal vision cutting across sectors and departments against the conventional approach of government's functioning in departmental mode or moving through vertical channels across departments. The convergence of various departments on a common platform such as health department, ICDS for Nutrition awareness, Legal Service Authority, Training & Technical Education, Education etc, and bringing services to the doorstep of poor women clearly brought positive changes in the lives of deprived women. They were provided with opportunities to empower themselves. Skill development trainings widened the income generation opportunities. Legal awareness increased and women came out in the open to fight against dowry related, family-related and other injustice. Increase in number of SHGs opened opportunities for accessibility to market and finance.

The project was a *Citizen-GovernmentPartnership* initiative of the government, with NGOs becoming key instruments for community outreach. IAEAat Kirti Nagar, Delhi North District, byfocusing on the needs and priorities of women such as literacy, poverty, access to credit, income, livelihood, and health services, drew women closer to the programme. Its community education practices were located in empowerment paradigm to facilitate women to clearly articulate as well as act upon their concerns and priorities. It aimed at enhancing women's ability to gain access to and control over economic, social and legal resources and opportunities. The empowerment process included providing health and legal services, counselling, information dissemination, raising awareness, literacy, and vocational skill building. By adopting participatory methods such as *face to face dialogue*, *counselling, public meetings, group discussions, NFE methods* and *participatory skill training* through participatory spaces such as camps, and community centre in the form of GRC, IAEA fulfilled women empowerment mandate of Govt of NCT Delhi through its Mission Convergence programme.

The new ruling government-AAP in NCT Delhi, however, decided to abruptly end the former Congress government's flagship GRC project under the Mission Convergence scheme. The reactions to scrapping of the project have, by and large, focused on the issue of non-payment due to financial problems; but there has not been any follow-up work on the implications of withdrawal of programme on empowerment of poor women in living in urban slums. The narratives of women in the case study, while highlighting the positive impacts of the programme on their lives, also give insights to the personal struggles which women in slums face in their day-to-day lives. Their struggles are intricately intertwined with the broader issues of gender-based violence, gender discrimination, and gendered poverty. The abrupt end of the programme implies forestalling of the empowerment process. The literacy initiatives through NFE programmes to address gender gap in literacy would receive a major blow. Health of poor women requires wide spread awareness and ease of access to door step health services such as easy contact with doctors, free availability of medicines, and medical consultation. Discontinued support in terms of information about legal rights and entitlements would constrain poor women's access to legal aid and to live in dignity. Women and girls would lose opportunities to learn vocational skills through various vocational courses such as beauty culture, stitching, sewing and computers.

Footnotes

The Govt. of National Capital Territory of Delhi

[2]The Bhagidari System (*people partnership*) is an initiative of the government of the state of Delhi in India to promote broad-based civic participation in local governance. It utilises processes and principles of multi-stakeholders (citizen groups, NGOs, the Government) collaborationto improve "the quality, efficiency and delivery of public services.The initiative was announced by erstwhile Chief Minister of Delhi Sheila Dixit   in December 1998.

[3]DSLSA is a statutory body created under Act of Parliament. It provides free Legal Aid & Advise, organise Lok Adalats & spreads Legal Awareness in Delhi.

[4] Jan Shikshan Sansthan (Institutes of People's Education) is a unique scheme crafted by the Government of India. JSS links literacy with vocational skills; provides vocational training to non-literate, neo-literate, as well as school drop outs by identifying skills as would have a market in the region of their establishment. They do not work in isolation but aim for convergence with other stakeholders in society. It is their endeavour to shape their beneficiaries into self reliant and self-assured employees and entrepreneurs.

[5]https://en.wikipedia.org/wiki/Pradhan_Mantri_Jan_Dhan_Yojana

[6]https://en.wikipedia.org/wiki/Pradhan_Mantri_Jeevan_Jyoti_Bima_Yojana,https://en.wikipedia.org/wiki/Pradhan_Mantri_Suraksha_Bima_Yojana

[7]https://en.wikipedia.org/wiki/National_Food_Security_Act,_2013

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