

ISSN 0976-0407

COMOSA
Journal of
Open
Schooling

VOLUME : II
NUMBER : 2
JULY-DEC. 2011



COMMONWEALTH OPEN
SCHOOLING ASSOCIATION

COMOSA Journal of Open Schooling

ISSN 0976 – 0407

AIMS AND OBJECTIVES

The Journal of Open Schooling is committed to school education through open learning methodologies. The journal is internationally referred, contributed, abstracted and subscribed. The affairs of the COMOSA Journal of Open Schooling are being managed with the help of an Editorial Advisory Board, and an Editorial Board.

The aims and objectives of the Journal are:

- to provide a forum across the Commonwealth Countries for scholarly discussion on concerns and issues in Open Schooling/Open Learning.
- to disseminate research, theory and practices including inter-disciplinary studies.

The COMOSA Journal includes research papers, articles, review of research, review of Books on Open and Distance Education and highlights programmes and activities in Open Schooling in Commonwealth Countries.

The research papers may inter alia reflect need of the study, objectives, research methodology including sample and results of the study. The researches may be empirical, archival, historical etc.

EDITORIAL ADVISORY BOARD

Dr. Sitanshu S. Jena

Chairman,
National Institute of Open Schooling,
NOIDA, India

Ms. Francis Ferriera

Education Specialist,
The Commonwealth of Learning,
Canada

Fr. T.V. Kunnunkal

Former Chairman, NIOS,
New Delhi, India

Prof. Mohan Menon

Chief,
Education, Planning & Management
Division, UNESCO-UNRWA,
Amman, JORDAN

Mr Heroldt Murangi

Director, NAMCOL,
Namibia

Ms. Fancy Amey

Deputy Director, Learner Support
BOCODOL, Botswana

Ms. Lystra Sampson-Ovid

Programme Director
Distance Education Unit
Ministry of Education
Trinidad & Tobago

Dr. Daniel Tau

Executive Director, BOCODOL,
Botswana

Prof. M. Mukhopadhyay

Director, ETMA,
Gurgaon

Prof. Tony Dodds

Consultant on Open Schooling &
Former Board Member,
NAMCOL, Namibia

Dr. Evelyn Nonyongo

Consultant on Distance Education &
Former Director,
UNISA's Continuing Education
Division

Dr. Dominique Abriox

President,
Athabasca University,
Canada

Prof. S. V. S. Chaudhary

Vice Chairman, NCTE,
New Delhi, India

Prof. Santosh Kumar Panda

Professor, STRIDE IGNOU,
New Delhi, India

EDITORIAL BOARD

CHIEF EDITOR: Dr. S. S. Jena, Chairman, National Institute of Open Schooling, Noida, India

EDITORS:

Shri U.N. Khaware

Secretary, NIOS, Noida, India

Shri C. Dharuman

Director (Evaluation), NIOS Noida, India

Dr. K. P. Wasnik

Director (Vocational Education), NIOS, Noida, India

Dr. Kuldeep Agarwal

Director (Academic), NIOS, Noida, India

Dr. Sanyam Bhardwaj

Director (SSS), NIOS, Noida, India

Mrs. Gopa Biswas

Joint Director (Academic), NIOS, Noida, India

Dr. Mamta Srivastava

Deputy Director (Vocational Education), NIOS Noida, India

Dr. Sonia Behl

Assistant Director (Academic) NIOS, Noida, India

Dr. Rajeev Prasad

Academic Officer (Chemistry), NIOS, Noida, India

EDITORIAL CORRESPONDENCE

All communications related to publications should be addressed to:

The Chief Editor, COMOSA Journal of Open Schooling, National Institute of Open Schooling, A-24/25, Institutional Area, Sector-62, NOIDA-201309, Uttar Pradesh (India)

SUBSCRIPTION INFORMATION

The COMOSA Journal of Open Schooling is bi-annual. The annual subscription is as follows:

	Within India	Outside India
For Individuals	Rs. 400/-	\$ 30
For Institutions	Rs. 1000/-	\$ 60

Subscription orders, accompanied by payment in the form of Demand Draft, drawn in favour of "**Commonwealth Open Schooling Association**" should be addressed to the **Editor, COMOSA Journal, National Institute of Open Schooling, A-24-25, Sector-62, Institutional Area, NOIDA-201309, (U.P.) (India)**

(continued in inside back cover)

COMOSA JOURNAL OF OPEN SCHOOLING

Volume : II

Number : 2

July-Dec. 2011

CONTENTS

EDITORIAL

- Tagore's Distance Education Model: Implemented at the Lok-Siksha Samsad in 'Shantiniketan' or 'abode of peace'
Md. Mizanoor Rahman and Santosh Panda 1
- Using ODL to Strengthen the Technological-Pedagogical-Content-Knowledge of the Indian School Teacher for Integrating Vocational Education through Blended Learning Environments in School Education.
Pranita Gopal 9
- Initiating the Indian School Teachers into the OER Movement: A Need Analysis
Bharti Dogra 21
- Role of Open and Distance Learning System in Reducing Stress among the Learners
Bal Krishna Rai and Oum Prakash Sharma 32
- Exploring involvement of Civil Society Organization in Open Schooling in India: A Partnership Perspective for Achieving Gender Equality in Secondary Education
Sukanta Kumar Mahapatra 39

Chief Editor's Note

Commonwealth Open Schooling Association (COMOSA), is a non-profit, democratic, collaborative and futuristic organization based on mutual respect and committed to support the efforts of open schooling institutions. The basic objective of the association is to cooperate and collaborate in development, promotion and introduction of innovative, high quality, relevant, equitable, gender-sensitive and cost-effective programmes of school education for sustainable development in commonwealth countries through Open and Distance Learning Mode, thereby targeting to achieve the Millennium Development Goals (MDG) of the United Nations.

The Association aims at achieving a number of outcomes. One of these is sharing of resources by compiling, publishing and distributing research and other materials. The Journal provides a forum to the member countries to mutually benefit by sharing views, activities, research and innovations, etc. I am happy to share the news that the COMOSA Journal of Open Schooling has been registered and assigned **Number ISSN 0976-0407**.

The present issue of the COMOSA Journal Volume-2, Number-2 (July-December 2011), has several articles/papers on varied themes which cover different aspects of Open and Distance Learning across the commonwealth countries.

The article titled **Tagore's Distance Education Model: Implemented at the Lok-Siksha Samsad in 'Shantiniketan' or 'abode of peace'** elaborates Tagore's model of distance education and how it contributed to expansion of education at the literacy and school level.

The paper on **Using ODL to Strengthen the Technological-Pedagogical-Content-Knowledge of the Indian School Teacher for Integrating Vocational Education through Blended Learning Environments in School Education** discusses how ODL can be used to develop the technological-pedagogical-content knowledge of the Indian School Teachers so as to encourage them to create blended learning environments in their respective disciplines.

The article titled, **Initiating the Indian School Teachers into the OER Movement: A Need Analysis** elaborates how the Indian school teachers need to be initiated into the OER movement.

The paper on **Exploring Involvement of Civil Society Organization in Open Schooling in India: A Partnership Perspective for Achieving Gender Equality in Secondary Education** precisely explains how civil society as a third sector of society can help to bridge the gap in education system drawing the successful practices both from formal school system and open school system.

How Distance Learning System can reduce the stress among the learners is very precisely explained by the article titled, **Role of Open and Distance Learning System in Reducing the Stress Among the Learners.**

The contributors of this issue of the Journal deserve special thanks for their valuable contribution on varied themes. I appreciate the hard work of the Editorial Board of COMOSA and Printing Unit of NIOS for bringing out this issue of the Journal. We look forward to receiving articles for the forthcoming issues of COMOSA. We invite comments and suggestions for quality improvement of this Journal.

Best Wishes !



(Dr. Sitanshu S. Jena)
Chairman, NIOS
&
Chairperson, COMOSA

Tagore's Distance Education Model: Implemented at the Lok-Siksha Samsad in 'Shantiniketan' or 'abode of peace'

Md. Mizanoor Rahman* and Santosh Panda**

*Bangladesh Open University, Bangladesh [mizan2006@yahoo.com]

**Indira Gandhi National Open University, India
[pandasantosh@hotmail.com]

Abstract

The concept of distance education began to be popularized at the literacy and school level under the leadership of Kavi Guru Rabindranath Tagore, the great poet and Nobel Laureate in literature, one of the pioneers who contributed to the education sectors in Bengal by developing and implementing different experimental approaches. Tagore travelled a lot and was exposed to different aspects of educational systems of various countries. He shared the experiences with his fellows through letters; and was exposed greatly to universal education through distance education during his trip to Russia during the 1940's after which the great poet implemented open non-formal education (ONFE) by organizing *Jatras* or folk-plays and *melas* or fairs. An early form of distance education was initiated in 1936 through the Lok-Siksha Samsad, a society which organized home study and examinations for persons who could not attend school. Rabindranath Tagore wrote a letter to Sir Aziul Hauque, Education Minister of Bengal on 18th September, 1936 for promoting distance education in Bengal requesting a change in law so that the following provision could be made possible: all male-female who are currently out of education would have the opportunity for education; they would study at home; they would sit for examination at the local town; there would be prescribed textbooks from lower to upper grades; the certificate would be coupled with livelihood and life skills; the cost of the programme delivery would be recovered from the money generated from the students; it would expand the opportunity for the writers to earn money through writing textbooks; and the certificate would provide students with the employment opportunities as they graduate under the government accreditation. It is reported that the government didn't implement the Tagore's DE model in Bengal although he launched programmes at the Lok-Siksha Samsad. It is reported that, at this time, there was no open university or well-established distance education centres in the world. But he did it. Text materials as print media were used to implement the open schooling programme from Lok-Siksha Samsad. This paper discusses Tagore's model of distance education and how it contributed to the expansion of education at the literacy and school level.

Keywords: Distance Education, Tagore Model of Distance Education, Lok Siksha Sambad.

Introduction

Tagore, Kavi Guru Rabindranath (1861-1941), first Nobel Laureate of Asia, was one of the education reformers in the Bengal basin (Bangladesh and West Bengal) and beyond. O'Connell (2003) states that as an alternative to the existing form of education, he started a small school at Shantiniketan in 1901 that developed into a university in 1921 and at rural reconstruction centre at Shrieniketon, where he tried to develop an alternative model of education that stemmed from his own learning experiences. Throughout his entire life he acquired knowledge through self-study which is central to the distance learning– the learner centric approach– which term the open universities in the current world use for imparting education at all levels. The ashram school “Shantiniketan” or “abode of peace” is located near the village of Bolpur, around 150 km north of Calcutta (Kolkata), India. Here, far removed from the noise and “vice” of the large city, he envisioned the pupils learning and being taught in the spirit of a new life-centered education. This concept also spread out to Europe. For instance, ten years later, in 1908-09 the factory owner Karl Schmidt founded the garden city of Hellerau, today a suburb of Dresden, in Germany. The ideological founders of the garden cities called for a move away from the urban towards the rural where one could live a life that was healthier and closer to nature. An analysis of these evidently similar developments, the question shows how deep the reciprocal relationship between the cultural institutions was and in what way they actually influenced each other. Scholars are interested in taking up some of these issues and conducting researches to find the answer (Shantiniketan-Hellerau conference, 2011). One similarity of these two institutes is to promote self-study and based on this approach, it is found that Shantiniketan launched. The early form of distance education during 1940s for promoting need-based education in the country. In an interview with the students of Moscow University, Tagore said:

....In the village where we are working, we have opened a school for the villagers only. The question may be asked, why another school? The reason is that, most of those who come from a relatively well-to-do background, want to pass the examination and get a degree. Therefore, ideal education is not for them. They do not want to waste their time in handicrafts or music or arts. They are interested in moving out as soon as possible by committing things to memory. I had to concede to this demand to some extent; otherwise not a single student would have come to my school. Another reason for this situation is that our country is poor and students come to the school to study in order to earn a living. They need the opportunity to pass the examination..... The other school is for those who do not aspire for a job with the government or in a merchant firm. I am trying to introduce everything that I consider essential for complete education in that school. Within no time, this village school will become an ideal school'.

(Source: Interview with students and teachers of Moscow University, 1930, n13, pp.241-242).

In this interview, the great poet introduced today's most popular slogan of the distance teaching institutes that is "reach to the unreached" or education for dropouts, and life-long learning (L3) activities of the international DE networking organization, the Commonwealth of Learning (COL), which is based on the notion of learning for life, learning throughout life and learning for a livelihood. Tagore implemented a distance education programme focusing on these slogans and the model is known as Tagore's Distance Education Model. This paper discusses the model of this early form DE where electronic technology was absent and only print media was used.

Open Non-formal Education at Shantiniketan

Ahmed (2011) states that Tagore was very active in imparting education for the disadvantaged or dropouts who did not have opportunity for attending the formal schools owing to various socio-economic reasons and he found acute disparity in educational opportunities between rural and urban areas. He criticised Lord Macaulay's system of education which came into being in 1854-although with several revisions in British India in order to focus on educating the upper strata of society through English and leaving it to these people to promote vernacular languages and literature. This system shocked Tagore. He tried to do something different and useful for the Bengal people. This resulted in the establishment of "Shantiniketan" with alternative approach where the medium of instruction was Bangla, the native language of Bengal. Tagore travelled throughout the world and was exposed to different aspects of educational systems of various countries. He shared the experiences with his fellows through letters (Rahman and Panda, 2011). The great poet travelled to Socialist Russia in 1930 and was highly impressed and motivated to see mass education programme covering all citizens and providing them with equal opportunities. He shared these with his fellows through letters and not only that, wrote two research articles titled "Bishwabiddalayer Roop" or "Structure of University" and "Shikhar Bikiron" or "Lightening of Education". In the first one, Tagore mentioned there were two famous universities in ancient India named "Nalanda"- (5th century CE to 1197 CE, Wikipedia, 2011) and "Takshashila (700BC)" (Incredible India, 2009) which reflected the indigenous aspects of the country that linked the original spirit of the native people. He criticized the university education system of British India where the concept of the former two ancient universities was completely absent. This is why education of the British Indian universities could not extend to the masses and teaching through foreign language was the main impediment. In his research, he compared British Indian education system with a compartment of a train which travels from one city to another city passing through hundreds of dark villages which get light from the windows only. Tagore said, "A group of people obtain the opportunity for education, get standard, and earn money – who are enlightened and behind this light the entire country remains in full eclipse". (Ahmed, 2011). Bhattacharya (2009) states that Tagore visited the Soviet Union as he had heard that a great revolution was taking place in the field of education

there. The letters he wrote from there were published in the collection called 'Letters from Russia'. In a letter written to his son Rathindranath, he wrote:

'Education is the best road to solve all our problems. For so long, most of the people in the society have been deprived of the opportunity for getting education – in case of India, totally deprived. How this education is spreading with great energy in all parts of the society here surprises me – not only in number but in fullness and without work. Not only in white Russia but also among the half-enlightened peoples of Central Asia, they are spreading education like a great flood – there is no dearth in their endeavour so that these people receive the best of the latest scientific discovery'.

(Source: Letter from Russia, 1930).

Tagore was exposed greatly to universal education through distance education during his trip to Russia and the great poet implemented open non-formal education (ONFE) by organizing *Jatras* or folk-plays and *melas* or fairs. Health related information got the top priority through ONFE (Rahman et al, 2011). The workers of the Village Welfare Department of the Institutes developed a programme to improve the health of neighboring rural population under ONFE. The ONFE programme included an outdoor dispensary, supplying expert advice and help from doctors and nurses, prevention of diseases by inoculation, anti-malaria measures, and training of village midwives. This department initially provided elementary education for boys and girls of the villages by establishing night and day schools with flexible learning approaches coupled with vocational education on some useful crafts. The department also incorporated some useful recreational activities. In the girls' school emphasis was placed on home-craft and gardening. Besides the children's school the department also provided opportunities for adult education through circulating libraries, lantern lectures and conferences, recitations from Epics and scriptures under ONFE approach.

One of the major organizations of the department was Brati Balaka Organization — Boy Scouts. Miss Sykes noted, "The Brati Balaks are an excellent example of the way in which Rabindranath used good ideas from all over the world in the building up of his Indian centre of education and service. The Brati Balak troops owe a great debt to the genius of Robert Baden-Powell, the founder of the English Boy Scouts, and his insight into the needs of the boys. Rabindranath studied his methods, saw where their value lay, and adapted them to the needs of the Indian village boy" (Sykes, 1943, p. 98, Jalan, 1976). A training camp is held each year for the training of the village boys as leaders of Brati Balkas in their own villages. The general aim of these camps is to introduce a boy to a wider concept of the art of living, which is taken to include the Art of Livelihood with its home-craft and handicraft, the art of thinking and coordination of experience, with the art of expression through games, songs, and drama (Sriniketan, 1928, p.: 6, Jalan, 1976). The Brati Balakas also helps in the organization of anti-malaria and village sanitation campaigns. Another important activity of the department was training camps for social service

workers. The prescribed syllabus included camp-life and home-craft. Elementary Agriculture and Handicrafts, scouting, cooperation, sanitation, hygiene and first aid, and also recreational activities like games, drama, singing and story-telling.

DE through Lok Siksha Samsad (People’s Education Council)

An early form of distance education was initiated in 1936 through the Lok-Siksha Samsad, a society which organized home study and examinations for persons, who could not attend the school. Bhattacharya (2009) states that Tagore had advised the Calcutta (Kolkata) University to introduce distance education way back in 1933. Tagore said,

the brain was connected by nerves throughout the body. The university had to act as the brain and spread nerves throughout. My suggestion is that a network of examination centres should connect the whole nation. It has to be done in such easy and widely available way that those outside the formal education system feel inspired — The women in the house or the men who, because of various reasons, do not get the opportunity to go to school can utilize their leisure ... it is not necessary to award degrees combining all the subjects ... often an individual has the knack for a particular subject. If the person can show his or her grip on a particular subject, the society holds the person in high esteem. I do not see any reason why a person should be deprived of that opportunity’.

(Source: Bhattacharya (2009))

Indian Education Commission 1882 was the first education commission in the history of modern India, which recommended flexible learning (FL) by establishing night schools and providing elasticity as regards attending hours to suit the needs of rural families (Das 2005, Rahman and Panda, 2011). Based on the recommendations, night schools were established where print and

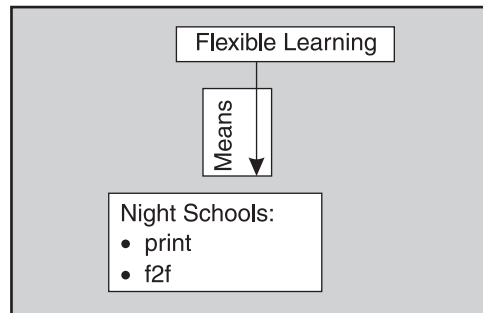


Figure 1: FL through night schools

face-to-face (f2f) human interactions were used (Fig. 1). Gradually the concept of flexible learning got popularized and later the concept of distance education began to be popularized at the literacy and school level under the leadership of Guru Rabindranath Tagore. He was indeed one of the pioneers in contributing to the education sectors in Bengal through developing and implementing different experimental approaches.

On 18 September, 1936 Rabindranath Tagore wrote a request letter to Sir Azizul Haque, Education Minister of Bengal for changing the law for promotion of DE in Bengal by incorporating following possible provisions (Ansaruzzaman 2011, Rahman and Panda, 2011, Rahman et al, 2011):

- (1) All male and female, who are currently out of education would have the opportunity for education;
- (2) they would study at home;
- (3) they would sit for examination at the local town;
- (4) there would be prescribed textbooks from lower to upper grades;
- (5) the certificate will be coupled with their livelihood and life skills;
- (6) the cost of the program delivery will be recovered from the money generated from the students;
- (7) it would expand the opportunity for the writers to earn money through writing textbooks; and
- (8) the certificate will provide students with the employment opportunities as they graduate under the government accreditation.

It has been reported that the government didn't implement the Tagore's DE model (Fig. 2) in Bengal; but he launched programmes at the Lok-Siksha Samsad. It is reported that, this time, there was no open university or well-established distance education centers in the world.

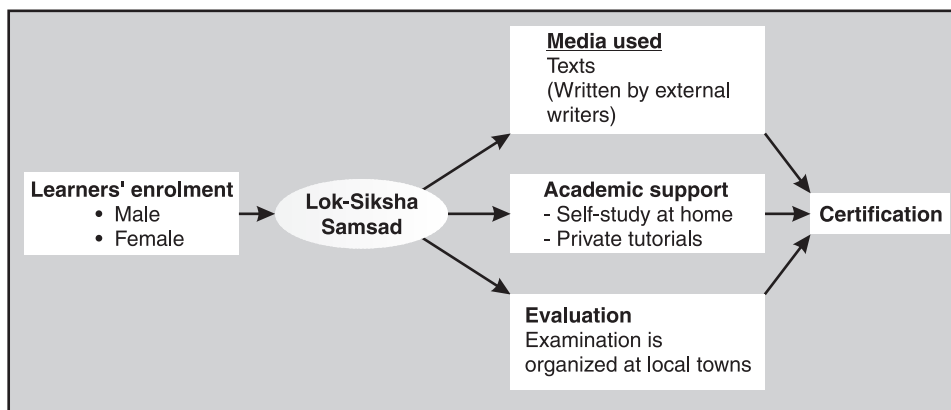


Figure 2: Tagore proposed DE model

Source: Rahman, et al (2011)

But he did it. Text materials as print media were used to implement the open schooling program from Lok-Siksha Samsad.

Jalan (1976) states that the Lok Siksha-Samsad is an examining body formed with a view to encourage home study among those who could not afford to continue their study in schools or colleges. At the education conference during the Bengal Education Week celebrated in February 1936, Tagore made some proposals and among other observations made therein, he stated, "if examination centers are started in towns and cities of different states for those men and women in the country who are for various reasons deprived of the benefit of school education, then many will feel encouraged to educate them-

selves at home in their leisure hours. Their education can be properly directed if their syllabus and textbooks are clearly prescribed from the lowest to the highest stages.

Tagore said the degrees that will be awarded through these examinations will be valuable in so far as they will bring social prestige and will be useful for earning a livelihood. It can, therefore, be hoped that all its expenses will easily be met through the fees received from candidates all over the country. On this occasion, the field for preparing text-books will be extended, and the material for mass education will increase. It will also provide means of livelihood to numerous authors (Tagore, 1936, pp. 38-39, Jalan, 1976). He also added that this desire could not materialize at Visva-Bharati for want of funds, but once the proposal was turned down by the education ministry of Bengal, he placed it before the authorities of Visva-Bharati who undertook to organize mass education on the lines suggested by him. Initially there were three examinations, "Adya, " "Madhy, " and "Upadhi, " roughly corresponding to the Matriculation, Intermediate and B.A. standards, respectively. Later, some more examinations were added, corresponding to pre- Matriculation standard. The syllabus included Bengali language, Bengali literature. History, Geography, Arithmetic, General Knowledge, Elementary Hindi, Hygiene and Science in different combinations for different standards. Under Tagore's direction and editorship, Visva-Bharati undertook the publication of a series of books in Bengali known as Lok-Siksha-Granthamala, on various subjects of scientific and general interest, specially written in easy language for the general public.

Conclusion

Could Tagore visualize today's modular education programmes? In short, Tagore had introduced everything that we club under Life Long Learning (LLL) today. Can we see LLL as learning for life, learning throughout life and learning for a livelihood for the welfare of human civilization? In all these spheres, Tagore had his concrete opinion which is very similar to our present-day concept.

References

- Ahmed, S. (2011). Education and Rabindranath's Ideas: *Literacy Bulletin*, Vol. 207. May 2011, Dhaka: Campaign for Popular Education.
- Ansaruzzaman, M. (2011). *Distance Education and Rabindranath*. The daily Kaler Kanta, dated 27 July 2011. Dhaka, Bangladesh.
- Bhattacharya, A. (2009). Tagore on the Right Education for India, *Asia-Pacific Journal of Social Science*, Vol. 1 (2), July – Dec 2009, pp. 21-47. Available at: <http://www.socialsciences-ejournal.org/2.2%20Asoke%20Bhattacharya.pdf> [Last accessed on 26 September 2011]
- Das, T. K. (2005). *Literacy and Continuing Education Programme Management*. Dhaka: Campaign for Popular Education

- Incredible India. (2009). Takshila: World's first University, Available at: <http://incredblindia.blogspot.com/2009/02/takshila-worlds-first-university.html>, [Last accessed on 1 October 2011]
- Interview with students and teachers of Moscow University. (1930)., n13, pp.241-242
- Jalan, R. V. (1976). Tagore — His Educational Theory and Practice and its Impact on Indian Education, A Dissertation Presented to the Graduate Council of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy, University of Florida, USA. Available at: http://www.archive.org/stream/tagorehiseducati00jala/tagorehiseducati00jala_djvu.txt [Last accessed on 29 September 2011]
- Letter from Russia. (1930). Prabasi, Agrahayan
- O'Connell, K. M. (2003). Rabindranath Tagore on education, *The encyclopaedia of informal education*, Available at: <http://www.infed.org/thinkers/tagore.htm>. [Last accessed on 28 September 2011]
- Rahman, M. M. and Panda, S. (2011). *Open University-NGO Collaboration in Leveraging ODL Toward Open Schooling: Developments from Bangladesh*, Submitted to ICDE conference held at Terbuka University, Indonesia. Available at: <http://www.ut.ac.id/icde2011/>
- Rahman, M. M., Panda, S. and Islam, M. T. (2011). *Technology Developments in Bangladesh and Higher Education through ODL*, "Effectively Implementing Information Communication Technology in Higher Education in the Asia-Pacific Region" NY: NOVA Science Publishers, Inc. (Submitted).
- Sykes, M. (1943). Rabindranath Tagore . Calcutta: Longmans, Green & Co., Sriniketan: The Institute of rural reconstruction.
- Santiniketan. (1928). Bulletin No. 1, West Bengal: Santiniketan Press.
- Shantiniketan-Hellerau Conference. (2011). *International conference entitled 'Shantiniketan-Hellerau: Universalist Education in the Pedagogical Province' on 7– 8 October 2011*. SASNET - Swedish South Asian Studies Network/Lund University. Available at: <http://www.sasnet.lu.se/content/international-conference-shantiniketan-hellerau-universalist-education-pedagogical-province>. [Last accessed on 26 September 2011]
- Tagore, R. (1336 B.S). Dhyani Japan. Pravasi , Bhadra.
- Wikipedia. (2011). *Nalanda*, Available at: <http://www.google.com/search?q=%E2%80%9CNalanda%E2%80%9D-%20%285th%20century%20CE%20to%20197%20CE%29&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a&source=hp&channel=np> [Last accessed on 1 October 2011]

Using ODL to Strengthen the Technological-Pedagogical-Content-Knowledge of the Indian School Teacher for Integrating Vocational Education through Blended Learning Environments in School Education

Pranita Gopal

Army Institute of Education, India, [pranitagopal@gmail.com]

Abstract

India needs a flexible education system: basic education to provide the foundation for learning; secondary and tertiary education to develop core capabilities and core technical skills; and further means of achieving lifelong learning. If we wish to revamp our educational system, we need to first equip our teachers with skill sets to develop their technological, pedagogical and content knowledge so they are able to use their experience and knowledge to create flexible learning environments for students. This paper discusses how ODL can be used to develop the technological-pedagogical-content knowledge of the Indian School Teachers so as to encourage them to create blended learning environments in their respective disciplines. The implication of such a learning environment is also exemplified.

Keywords: Technological-Pedagogical-Content-Knowledge (TPCK) Framework, Vocational Education, Blended Learning Environments, School Education in India, ODL

Introduction

India is a rapidly developing economy, yet our education system does not equip our students to enter the labor market after their schooling, so that they are able to empower themselves with skill sets to contribute to the growth of the economy and reap its benefits. The vocational education system is a source for the skilled workforce of the country, but this system is not being able to appropriately respond to the needs of the labor market. A knowledge economy requires India to develop workers – knowledge workers and knowledge technologists - who are flexible and analytical and who can be the driving force for innovation and growth. To achieve this India needs a flexible education system: basic education to provide the foundation for learning; secondary and tertiary education to develop core capabilities and core technical skills; and further means of achieving lifelong learning. The education system must be

attuned to the new global environment by promoting creativity and improving the quality of education and training at all levels.¹

If we wish to revamp our educational system, we need to first *equip* our teachers with skill sets that will enable them to be an asset during this transformation. One way to equip the teachers with skill sets is to provide them with opportunities to learn technological, pedagogical and content knowledge so that they are able to use these skills in developing learning resources for their students in their respective subject discipline.

Technological-Pedagogical-Content-Knowledge (TPCK) Framework

Technological-Pedagogical-Content Knowledge (TPCK) Framework by Koehler and Mishra (2006) is a viable option to develop technological competence academicians across disciplines in education. The TPCK framework is the integration of three bodies of knowledge in teachers: content, pedagogy and technology (Koehler and Mishra, 2005).

- **Technology (T)** encompasses modern technologies such as computers, the Internet, digital video, and more commonplace technologies including overhead projectors, blackboards, and books.
- **Pedagogy (P)** describes the collected practices, processes, strategies, procedures, and methods of teaching and learning. It also includes knowledge about the aims of instruction, assessment, and student learning.
- **Content (C)** is the subject matter that is to be learnt or taught. School mathematics, 1st standard Science, and 5th Standard English are all examples of content that are different from one another.
- **Technology-Pedagogical-Knowledge (TPK):** is used to describe the knowledge of how technology can support pedagogical goals, like, collaboration, group dynamics etc.
- **Technology-Content-Knowledge (TCK) :** is used to describe how teachers can use their knowledge of technology to make the content more interesting or in the words of Koehler and Mishra (2005) TCK is useful for describing teachers knowledge of how a subject matter is transformed by the application of technology
- **Pedagogical-Content-Knowledge (PCK)** is when the knowledge of Pedagogy helps the teacher to teach Content in the classroom, so that learning takes place. This could be in terms of arranging easier concepts before tougher concepts, using the student's prior knowledge to develop the concept etc.
- **Technology-Pedagogical-Content-Knowledge (TPCK) :** is the integration and negotiation of the above components of knowledge to ensure that learning is augmented.

¹The World Bank Report (2007) titled Skill Development in India: The Vocational Education and Training System. Available Online at <http://siteresources.worldbank.org/INTINDIA/2132853-1191444019328/21497927/IndiaVocationalTrainingReport.pdf> Last accessed on 11 April 2012

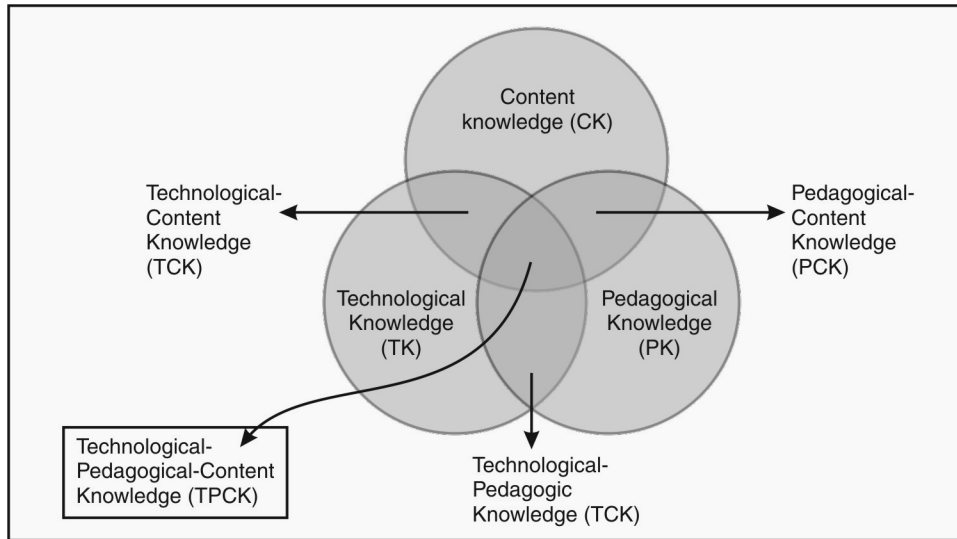


Figure 1: TPACK Framework (Koehler and Mishra, 2005)

Koehler and Mishra (2009) state that TPCK is the basis of effective teaching with technology, requiring an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that students face; knowledge of students' prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge to develop new epistemologies or strengthen the old ones.

TPCK framework guides curriculum design and helps create conceptually and epistemologically coherent learning environments. Using the learning technology by design approach, Koehler and Mishra (2006) teach courses that develop teachers' understanding of technology. In the learning-technology-by-design approach, emphasis is placed on learning by doing. The teachers are presented with activities that allow their content knowledge and pedagogical knowledge to amalgamate with the correct appropriate technology that would help translate the content and pedagogical knowledge into an effective learning medium with the integration of technology. This paradigm forces the teacher to become an active participant in the process of learning to integrate technology into their pedagogic-content knowledge (Mishra & Koehler, 2003; Mishra, Zhao, & Tan, 1999).

Mishra and Koehler (2006) cite various skills such as learning to operate digital cameras; using video and image editing software; conducting Internet searches and uploading and downloading files; and designing Web pages using software such as Dreamweaver or FrontPage as a part of the learning experiences of the 28 teachers that participated in their study. These teachers learned a lot about how to focus a message in just two minutes of video, let images and symbolism convey ideas in an effective manner, inspire audiences, work

together in groups, give and receive feedback, and communicate with audiences.

Vocational Education and Blended Learning Environments in School Education in India

In the Wood's Dispatch of 1854, the need for "*occupational*" education has been emphasized. This idea was strengthened in Mahatma Gandhi's Basic Education. Acharya Ram Murthy's review of the National Policy on Education, expressed that a core component of vocationalisation has to be a part of the curriculum for all, because a large section of students drop out before reaching class VIII and many of them who complete class VIII do not move into secondary stage of formal education (Devadas, 2004). Dewey (1916) proposed two key purposes for education for vocations: first, to identify the occupations individuals are suited to and, second, to assist them in developing the capacities to be effective in their occupation. There are three imperative reasons identified by Billet, (2011) for vocational education in the formal school education system. These are (i) the need for skilled workers, (ii) need for more educated youth and (iii) the engagement of young people with civil society. It is for this reason he further claims that the vocational education curriculum needs to be considered as encompassing sets of socially derived and personally constructed concepts that are both multidimensional and complex and that allow individuals to engage in productive work for the society.

Vocational education in India refers specifically to vocational courses offered in school Grades 11 and 12 under a centrally sponsored scheme termed 'Vocationalization of Secondary Education'. Vocational Education at the +2 stage, also known as higher secondary stage, develops competencies (knowledge, skills and attitude) required by a specific occupation or a group of occupations, through diversified vocational courses to prepare pupils for the world of work, especially for self-employment. The Vocational Education Program (VEP) was started in 1976-77 under the programme of Vocationalisation of Higher Secondary Education in general education institutions. The National Working Group on Vocationalisation of Education (Kulandaiswamy Committee, 1985) reviewed the Vocational Education Programme in the country and developed guidelines for the expansion of the programme. Its recommendations led to the development of the Centrally Sponsored Scheme (CSS) on Vocationalisation of Secondary Education, which started being implemented from 1988. Its purpose is to "enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provide an alternative for those pursuing higher education without particular interest or purpose." Vocational education falls under the purview of the Ministry of Human Resources Development (MHRD). The All-India Council for Vocational Education (AICVE), under MHRD, is responsible for planning, guiding and coordinating the program at the national level. State Councils for Vocational Education (SCVE) perform similar functions at the state level.

According to report available at the World Bank Report website² the vocational education stream in India is quite small enrolling less than three percent of students at the upper secondary level. Vocational education courses are offered in schools at Grades 11 and 12 (in most states with vocational streams, vocational and general courses are offered by the same institution). These are aimed at preparing students for entry into the labor market. There are 6800 schools, almost all in the public sector, enrolling close to 400,000 students in the vocational education scheme – utilizing just 40 percent of the available student capacity in these institutions. These schools offer a total of over 100 courses in various areas - agriculture, business and commerce, humanities, engineering and technology, home science and health and para medical skills.

The Centrally Sponsored Scheme of Vocationalisation of Secondary Education provides for diversification of educational opportunities so as to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provide an alternative to those pursuing higher education. The Centrally Sponsored Scheme of Vocationalisation of Secondary Education at + 2 level provides for financial assistance to the States to set up administrative structure, area vocational surveys, preparation of curriculum, text book, work book curriculum guides, training manual, teacher training programme, strengthening technical support system for research and development, training and evaluation etc. It also provides financial assistance to NGOs and voluntary organizations towards implementation of specific innovative projects for conducting short-term courses.³

Vocational students appear intent on entering higher education rather than entering the labor market. Overwhelmingly, students who get through the vocational stream want to proceed to further education. This is not surprising given the relatively weak labor market outcomes. The few rigorous evaluations of program impacts that have been undertaken point to low levels of gainful employment of these graduates. There is a need to adopt a system that allows students to gain skill sets that would allow them to use their vocational skills when required and also gain enough competencies in subject areas so that they are able to pursue higher education when they feel the need. Tapping into the potentials of technology to provide the students with such opportunities is the need of the hour. Blended learning is one such approach.

In 2003, the American Society for Training and Development identified blended learning as one of the top ten trends to emerge in the knowledge delivery industry” (cited in Rooney, 2003) (Graham, 2004). Using Garrison & Vaughan (2007) the three key assumptions of a blended learning environment are:

1. Thoughtful integration of face-to-face and online learning

²Skill Development in India: The Vocational Education and Training System – Available at- <http://info.worldbank.org/etools/docs/library/235724/Skills%20Development%20in%20India%20the%20Vocational%20Education%20and%20Training%20System.pdf>

³From: http://mhrd.gov.in/scheme_vocationalisation last accessed on 11 April 2012

2. Fundamentally rethinking the course design to optimize student engagement
3. Restructuring and replacing traditional class contact hours

Blended learning is now constantly positioned as one of the emerging trends in education (Allen, Seaman and Garrett, 2007; Graham, 2006; Garrison and Kanuka, 2004) and therefore, is of particular strategic importance in the future of educational institutions, their students and teachers as well as in the widening community of professional education and training. Blended learning has been defined as the combination of face- to-face and online learning (Williams, 2002). Blended learning should be viewed as an opportunity to redesign the way that courses are developed, scheduled, and delivered in education through a combination of physical and virtual instruction, “bricks and clicks” (Bleed, 2001). Blended learning combines training, coaching, and self help. It involves more management, accepting that people development is a continual process, through which experience of doing the work is gained (Davies, 2003). Stacey and Gerbie (2009) use a simple idea to represent blended learning. They call it a “...combination of physical and virtual learning environment” the emerging trend in education to blend text-based asynchronous Internet technology with face-to-face learning—often referred to as simply blended learning. Garrison and Kanuka (2004) posit that blended learning is an effective and low-risk strategy which positions educational institutions for the onslaught of technological developments that will be forthcoming in the next few years.

Blended learning models should be developed such that they respond to local, community or organizational needs rather than using a generic approach (Sharpe, Benfield, Robert and Francis, 2006). Effective adoption of new technologies in classroom setting requires teachers not only to have the knowledge about the technology but also to have experienced successful models of computer integration in a teaching and learning environment (Lee, 1997). This means that the teachers should be equipped with skills that help them present learning material to students both in face to face situations and in technology supported environments.

ODL environment for developing TPCK of the Indian School Teacher

Open and Distance Learning (ODL) systems have the philosophy of removing barriers to education and allowing learners to study where they want, when they want and what they want. It is all about increasing educational access and educational choice. ODL materials are prepared by individuals, but more often by small teams made up of people with skills such as curriculum design, instructional design, tutorial support and print or web design skills.(COL, 2005). ODL material could be either print or electronic or multimedia based, but the thrust of such material is to help the learner gain knowledge independent of the teacher and by engaging with the text. Table 1, discusses how the various components of the TPCK Framework can be developed in the school teachers using the ODL system.

Table 1: Developing TPCK Components using ODL System

TCPK Component	How ODL can help develop TPCK components in School Teachers
Content Knowledge(CK)	The content knowledge needs to be regularly updated by the individual academician - especially at the school level, where teachers have obtained their degrees early in their teaching careers. Content experts along with Instructional Designers can develop the ODL material for teachers to regularly update their content. Using the appropriate technologies, like, Web 2.0 tools, there can be a fair amount of interactivity added into ODL material, where teachers themselves can engage in peer learning and peer tutoring.
Pedagogical Knowledge (PK)	The deep knowledge about the methods of teaching a particular subject discipline is important to make learning effective. For academicians other than that of the Education discipline, the various pedagogical options available within that discipline can be presented via the ODL environment. This would allow for flexible learning environments and give the academician learning control. This would also allow the academician experiment with the methodological options in their classrooms as per their convenience.
Technology Knowledge (TK)	Drawing from Koehler and Mishra (2009) this domain of knowledge is in a <i>state of flux</i> ; and concerns itself with the academician recognizing when use of computers/ internet can assist or impede learning. Within the technology enhanced ODL environment, learning this domain could be a hands on experience with the use of video tutorials, real-time assistance, and learning and sharing of various educational resources. This

	<p>domain of knowledge is best learnt under the framework of <i>situated cognition</i> (Brown, Collins, & Duguid, 1989) and <i>Cognitive Apprenticeship</i> (Collins, Brown, and Newman, 1989).</p>
<p>Pedagogical Content Knowledge (PCK)</p>	<p>Drawing from Shulman (1986) <i>knowledge of pedagogy</i> is about helping the teacher understand how do students learn and what are the common misconceptions / errors associated with the concept being taught; how the various concepts can be best assessed and what interlinks between concepts can augment student learning. In an ODL environment, participating in online discussion groups can help academicians strengthen their PCK. They can also document and deconstruct their meta-cognitive thought process: a very essential tool in gaining PCK (Shulman,1986)</p>
<p>Technological Content Knowledge (TCK)</p>	<p>Koehler and Mishra (2009) state that TCK is an understanding of the manner in which technology and content influence and constrain one another. The ODL environment presents easy access to sharing of experiences of academicians for using particular technology with specific content. With the rapid transmission of experience, immediate questions/ comments and concerns can help the academician improve her/his own learning experiences and in turn the student's learning experience.</p>
<p>Technological-Pedagogic Knowledge (TPK)</p>	<p>TPK is an understanding of how a particular technology changes the dynamics of pedagogy in the classroom. This domain of knowledge develops when an academician understands the constraints and affordances provided by each technological-pedagogical option. Academicians across disciplines can</p>

	<p>share and post their experiences within the arena of technological-pedagogical knowledge in an ODL environment. Experts within this domain can regularly post various updates that can help academicians see, understand and implement various options in their classrooms.</p>
Technological Pedagogical Content Knowledge (TPCK)	<p>Koehler, Mishra, and Yahya (2007) state that TPCK requires understanding the representation and formulation of concepts using technologies; pedagogical techniques that utilize technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help address these issues; knowledge of students, prior knowledge and theories of epistemology; and an understanding of how technologies can be utilized to build on existing knowledge and to develop new or strengthen old epistemologies. Learning within the ODL framework, academicians are presented with opportunities where they can document and view for themselves the interplay of technological-pedagogical- and content knowledge. One of the offshoots of the ODL paradigm is Open Educational Resource Initiative. This initiative is based on a philosophical view of knowledge as a collective social product to become a social property. Learning within the ODL environment and developing learning resources that other fellow academicians can use within the OER initiative can augment learning experiences of all the stakeholders in higher education.</p>

Using TPCK to develop Blended Learning Environments for Integrating Vocational Education in School Education: Implications for India

Students enrolling in vocational courses across the country, require to be given the opportunity of pursuing higher education in any discipline which they wish to and in the same manner students enrolled in regular courses

should be allowed to make use of existing vocational education courses during their school tenure so that they have employment opportunities available to them once they are out of school. Theoretically various educational commissions have desired this situation. Today this situation can become a reality if *blended learning models are used to impart school subjects to vocational education students and vocational subjects to formal school students*. Figure 2 depicts how TPCK training of the Indian School Teacher involved in both Formal Schooling and Vocational Education can benefit the school children.

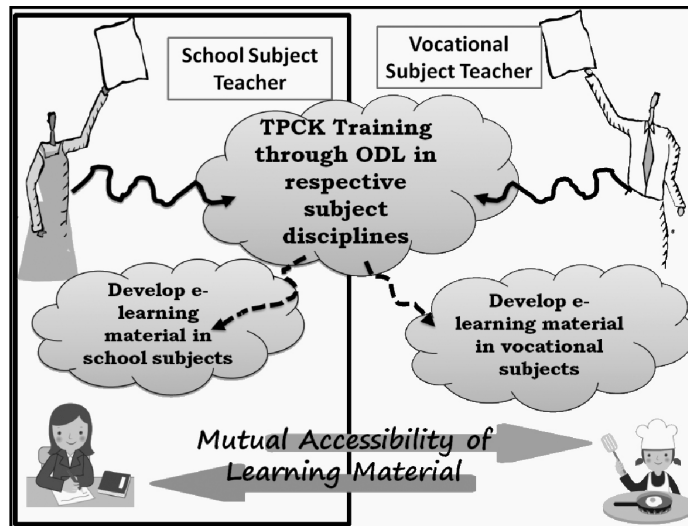


Figure 2: Role of TPCK Training of Teachers and Benefits to Students

To achieve the goal of having knowledge workers who are flexible, analytical, adaptable and multi skilled, India needs flexible education and training system that will provide the foundation for learning, secondary and tertiary education and to develop required competencies as means of achieving lifelong learning (Goyal⁴). In the same India Country Paper, Goyal identifies the following as the reasons for low performance of vocational education courses- Shortage of trained teachers and trainers; Inadequate linkages with Industries; Absence of a National Competency Testing and Accreditation system; Lack of equivalence for employment purposes; Lack of vertical mobility; Inflexible curriculum and Lack of convergence between various agencies and Lack of overall social recognition.

Using a blended learning approach to vocational education, would ensure that students enrolled in vocational courses are also able to make use of formal school lessons. In the blended learning environments, the e-learning material can be so created that the basic skills can be taught using various information and communication technologies, like, computers and even mobile

⁴www.unevoc.unesco.org/up/India_Country_Paper.pdf - Last accessed on 11 April 2012 – Undated Paper.

phones. This would ensure that the shortage of trained teachers and trainers is reduced to an extent. Secondly, as the material would be available online for students to use, the Government of India and NIOS, India can create a National Competency Testing and Accreditation System that allows students to make use of the facilities of online testing for theoretical constructs of vocational education and the same agencies can identify certain nodal agencies where the practical aspects can be tested. With the framework of *blended learning* apprenticeship tasks also can be planned so that the learner is able to benefit from both the apprenticeship experience and from the knowledge repositories.

Blended learning environments have always been understood as a blend between technology mediated virtual learning environments and face to face interaction. Another aspect that can be considered in blended learning environments is to blend knowledge and skills of formal school and vocational education for students using both technology mediated virtual learning environments and face to face classroom environments, so that students from a very early age are capable of making use of opportunities – either in the form of employment or in the form of higher education. For this to happen, teachers themselves need to be equipped with skill sets that would ensure that they are able to create learning environments for their students that would augment their learning. With the never ending pressure on teachers using technology in the teaching learning process this would only assist the teachers. Hence, providing an opportunity for teachers to strengthen their Technological-Pedagogical-Content Knowledge via the ODL mode will ensure that teachers themselves are able to provide their students with such learning opportunities.

References

- Allen, I.E., Seaman, J. and Garrett, R. (March, 2007). Blending In: the extent and promise of blended education in the United States. Retrieved April 11, 2012 from http://sloanconsortium.org/publications/survey/pdf/Blending_In.pdf
- Billet, S (2011). Vocational Education: Purposes, Traditions and Prospects, Springer
- Bleed, R. (2001). A hybrid campus for the new millennium. Educause Review. January/February 2001.
- Devdas (2004). Vocational Education in Rajput, J S (Ed) (2004) Encyclopedia of Indian Education, NCERT, New Delhi
- Garnham, C., & Kaleta, R. (2002). Introduction to hybrid courses. Teaching with Technology Today, 8(6).
- Garrison, D. R., & Vaughan, N.D. (2008). Blended learning in higher education. San Francisco: Jossey-Bass.
- Koehler, M. J. & Mishra, P. (2005). What happens when teachers design educational technology? The development of Technological Pedagogical Content Knowledge. Journal of Educational Computing Research. 32(2), 131-152.

- Koehler, M. J., & Mishra, P. (2009). What Is Technological Pedagogical Content Knowledge?? *Contemporary Issues in Technology and Teacher Education*, 9, 60-70.
- Koehler, M., Mishra, P., & Yahya, K. (2007). Tracing the development of teacher knowledge in a design seminar: Integrating content, pedagogy and technology. *Computers & Education*, 49(3), 740-762.
- Koehler, M., Mishra, P., & Yahya, K. (2007). Tracing the development of teacher knowledge in a design seminar: Integrating content, pedagogy and technology. *Computers & Education*, 49(3), 740-762.
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A new framework for teacher knowledge. *Teachers College Record* 108 (6), 1017-1054.
- Mishra, P., Yong, Z., & Tan, S. (1999). From concept to software: Developing a framework for understanding the process of software design. *Journal of Computing in Education*. 32(3). 220- 238.
- Sharpe, R., Benfield, G., Roberts, G., & Francis, R. (2006). The undergraduate experience of blended e-learning: a review of UK literature and practice. Higher Education Academy. Retrieved April 11, 2012 from <http://www.heacademy.ac.uk>.
- Shulman, L. S. (1986). "Paradigms and research programs in the study of teaching." In M.C. Wittrock (Ed.), *Handbook of research on teaching*. New York: MacMillan.
- Vaughan, N. (2007). Perspectives on Blended Learning in Higher Education. *International Journal on E-Learning*, 6(1), 81-94.
- Williams, C. (2002). Learning on-line: A review of recent literature in a rapidly expanding field. *Journal of Further and Higher Education*, 26(3), 263-272.

Initiating the Indian School Teachers into the OER Movement: A Need Analysis

Bharti Dogra

Indira Gandhi National Open University, India, [bhartidogra1@yahoo.co.in]

Abstract

Open Educational Resource (OER) movement is seen as an altruistic movement to be a part of the sharing culture. This movement is specially meant for those who have remained unprivileged to take the benefit of different educational resources so far. This OER movement is at nascent stage in India. Very few Indian OER initiatives are targeted at school teachers and school students. This paper tries to make a need analysis for initiating the Indian school teachers into the OER movement.

Keywords: OER, ICT resource, OCW,CCE.

Introduction

Knowledge is power. This knowledge must be shared equally with developed, developing and undeveloped countries. Developing countries may not have sufficient resources to provide adequate information, training as well as capacity building for its workers. Although ICT resources have changed the way information can be stored, processed, accessed and utilized but students may not be able to get access to these new resources mainly due to economic reasons or lack of awareness.

During lifetime, as human beings, we take so much from the society that our it becomes our duty to return at least some part of it back to the society to whom we owe so much. If knowledge is power then let us learn to share it. "To remain human and liveable, knowledge societies will have to be societies of shared knowledge" (UNESCO, 2005). "Knowledge evolves and multiplies when shared". It remains stagnant and decays when confined. This is the primary objective of Open Educational Resources Movement i.e. to share the resources worldwide. This paper tries to make a needs analysis of initiating the Indian school teachers into the OER movement.

What are Open Educational Resources (OER)?

The term Open Educational Resources (OER) was adopted at a UNESCO meeting in 2002 to refer to open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes. Open educational resources are defined by the Wikipedia community *as being basically content, instructional approaches, activities and other resources, available for free and that are believed to be useful in educational contexts.*

The idea behind the concept is to promote access to education to a wider audience, especially those from deprived regions of the world, where the open resources can be freely reused, improved and repurposed to fit in to different contexts. Currently most OERs are generated by Educational organizations, usually Universities, using new or existing grant funding to do so (Lane, 2008).

The philosophy of Open Educational Resources (OER) conceives of educational materials as common public goods from which all should benefit, but most especially those who receive the least benefit and support from current systems of education, whether publically or privately funded. This view is supported by the idea that knowledge itself is a collective social product, one that naturally forms a common pool that needs to be accessible to all. The view is strongly aligned with the financial reality of educational funding, since the vast majority of educational materials are publically funded in diverse ways, directly or indirectly, but the view is not aligned with the reality of the materials distribution, which is frequently non-public, closed, and tightly controlled. (Rossini, C., 2010).

How the OER movement has shaped the way we learn?

OER movement was started to speed up the development of new learning resources, stimulate internal improvement, innovation and reuse and help the institutions to keep good records of materials and their internal and external use. Educational institutions should leverage taxpayers' money by allowing free sharing and reuse of resources developed by publically funded institutions.

The review of the OER literature shows that there are THREE types of open resources:

1. Open Source (OS)

- Concerns software
- Linux
- Moodle
- Instances of freeware etc.

2. Open Access

- Concerns journal articles – usually peer reviewed
- Readers can retrieve articles without financial or access barriers
- No fees, registration, or membership
- Proponents argue:
 - ✓ Employed researchers contribute articles & review for free, so their employers should not have to pay to access the articles
 - ✓ Research funded by government agencies should be available for free.

3. Open Educational Resource (OER)

“Open Educational Resources” – term first adopted at UNESCO 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries

- Forum funded by William & Flora Hewlett Foundation. In defining Open Educational Resources, the elements to consider are:
 - ✓ The vision for the service: Open access to the resource, with provision for adaptation
 - ✓ The method of provision: enabled by information/communication technologies.
 - ✓ The target group: a diverse community of users.
 - ✓ The purpose: to provide an educational, non-commercial resource

Analysis of the Major OER Initiatives

The major OER initiatives can be categorized as:

I. Open Courseware Initiatives

An OpenCourseWare (OCW) is a free and open digital publication of high quality university level educational materials. These materials are organized as courses, and often include course planning materials and evaluation tools as well as thematic content. OpenCourseWare are free and openly licensed, accessible to anyone, anytime via the internet– MIT OpenCourseWare, Kyoto-University OpenCourseWare, Tokyo Tech OpenCourseWare, Utah State University OpenCourseWare.

II. Institutional Initiatives

For example - Carnegie Mellon Open Learning Initiative (OLI), Open University (UK) *Open Learn* initiative, China Open Resources for Education (CORE)

III. Collaborative Development Projects

Connexions project at Rice University, Wikieducator

Connexions is a place to view and share educational material made of small knowledge chunks called modules that can be organized as courses, books, reports, *etc.* Anyone may view or contribute:

- **authors** create and collaborate
- **instructors** rapidly build and share custom collection
- **learners** find and explore content

IV. General Repositories

MERLOT (Multimedia Educational Resource for Learning and Online Teaching)

S. No.	OER Initiatives	Philosophy	Features
I Open Course Wares			
1.	MIT Open Course Ware	<ol style="list-style-type: none"> 1. MIT values learning, including e-learning, over financial gain. 2. Vest (2004), the former president of MIT, has given five reasons for MIT to "give away all its course materials via the Internet": to advance education and widen access; greater opportunity for MIT faculty to see and reuse each other's work; to create a good record of materials; increased contact with alumni; and a way to help their own students become better prepared. 	<ol style="list-style-type: none"> 1. MIT OCW is a free and open website offering high quality teaching and learning materials. 2. In October 2000 the MIT team considered the idea of making the course materials publically accessible online at no charge. 3. MIT OCW offers lecture notes, problem sets, syllabi, reading lists and simulations as well as a small selection of complete video and audio lectures. 4. MIT is presently offering 2000 courses.
2.	JOCW Consortium	<p>The purpose for joining OCW is:</p> <ol style="list-style-type: none"> 1. to create positive change among Japanese universities, including modernizing presentation style among lecturers, as well as sharing learning material (Makoshi, 2006) 2. Japanese researchers have been particularly interested in the technical aspects of OCW, for example in creating semantic search engines. 	<ol style="list-style-type: none"> 1. In 2006 the OCW International Conference was held at Kyoto University, and at that conference, the Japan OCW Association was reorganized into the Japan OCW Consortium (Kobayashi, T. & Kawafuchi, 2006a).
3.	Utah State University OpenCourseWare	<ol style="list-style-type: none"> 1. Because technology makes it possible for USU to increase the reach of educational opportunity, therefore USU has a moral obligation to do so. 2. Utah State University OCW supports Utah State University's mission to serve the public through learning, discovery, and engagement, and is true to Utah State University's guiding principle that academics come first. 	<ol style="list-style-type: none"> 1. A free and open educational resource offering high quality materials that are used in the teaching of undergraduate and graduate subjects at USU. 2. Materials are available on the Internet, free of charge, to any user anywhere in the world. 3. The initial offering has focused on content that enables users to build local capacity in key areas, including irrigation engineering, instructional design and agriculture.

		<p>3. Utah State University OCW contributes to the “shared intellectual commons” in academia, which fosters collaboration across Utah State University and among other scholars across disciplines and around the world.</p>	<p>4. The initiative also aims to catalyze the growth of communities of learners around USU’s OpenCourseWare.</p>
<p>II Institutional Initiatives</p>			
4.	<p>Open University (UK) OpenLearn initiative</p>	<p>The purpose of OpenLearn is:</p> <ol style="list-style-type: none"> 1. to be open to people, places, methods and ideas. Open, in particular, to people who do not have the traditional entry qualifications to university. 2. The philosophy of open access is a perfect fit with founding principles of open university of UK; the marvelous resonance of the whole open source, open innovation, open educational resources movement. 	<ol style="list-style-type: none"> 1. OpenLearn, launched by the Open University (OU) in October 2006. 2. OpenLearn was intended to publish the widest possible selection of OU course materials. 3. Its explicit goal was to engage and support self-directed learners using the latest Web 2.0 technologies. 4. LabSpace (a part of OpenLearn) is a community-led environment that fosters the concept of sharing and re-using material. 5. LearningSpace provides a first selection of Open University learning materials that are freely available for learners to use for their own study, away from any formal teaching environment. Learning materials cover academic subjects, professional development and study skills development.
5.	<p>China Open Resources for Education (CORE)</p>	<ol style="list-style-type: none"> 1. CORE promotes closer interaction and open sharing of educational resources between Chinese and international universities, which CORE envisions as the future of world education. 	<ol style="list-style-type: none"> 1. It is a non-profit organization. 2. CORE helps in : <ul style="list-style-type: none"> • coordinating use of open courseware from MIT and other universities within China. • enhancing the quality of education in China. • offering Chinese open courseware for sharing globally.

6.	Carnegie Mellon Open Learning Initiative (OLI)	<p>Opening Learning – Why Open?</p> <ul style="list-style-type: none"> • Philosophy: Knowledge is a public good. • Research Model: Virtuous cycle needs large and diverse “N” • Productivity: Move from individual intuition based course development to community evidence based development 	<ol style="list-style-type: none"> 1. Launched at Carnegie Mellon University in the fall of 2002, the Open Learning Initiative (OLI) is dedicated to the development of freely available, stand-alone college-level online courses informed by the best current research from the cognitive and learning sciences. 2. OLI's process for designing online courses works to mitigate against the expert's blind spot by using a variety of techniques to provide scaffolding for novice learners as they approach a particular discipline and its concerns for the first time. 3. OLI's toolkit for providing this kind of feedback to learners includes sophisticated tutoring systems and virtual laboratories, as well as short Flash animations with spoken narration (based on the cognitive principle that students learn best if given mutually reinforcing information over both auditory and visual channels).
III Collaborative Development Projects			
7.	Connexions project at Rice University	<ol style="list-style-type: none"> 1. Connexions have the potential to change the very nature of teaching and learning, producing a dynamic, inter-connected educational environment that is pedagogically sound, both time and cost efficient, and engaging. 	<ol style="list-style-type: none"> 1. The <i>Connexions</i> project at Rice University has created an open repository of educational materials and tools to promote sharing and exploration of knowledge as a dynamic continuum of interrelated concepts. 2. Available free of charge to anyone under open-content and open-source licenses, Connexions offers high-quality, custom-tailored electronic course material, which is adaptable to a wide range of learning styles, and encourages students to explore the links among concepts, courses, and disciplines.

8.	Wikieducator	<p>1. WikiEducator believes that learning materials should be free for all students of the world. WikiEducator invests in educators to share knowledge freely.</p>	<p>1. Wiki Educator is a free community resource supported by the Commonwealth of Learning (COL) (http://www.col.org/) for the development of free educational content.</p> <p>2. The WikiEducator is an evolving community intended for the collaborative:</p> <ul style="list-style-type: none"> • planning of education projects linked with the development of free content; • development of free content on Wikieducator for e-learning; • work on building open education resources (OERs) on how to create OERs. • networking on funding proposals developed as free content.
IV General Respositories			
9.	MERLOT (Multimedia Educational Resource for Learning and Online Teaching)	<p>MERLOT believes in Openness & Sharing</p> <p>WHY "OPEN"</p> <ul style="list-style-type: none"> • Open means "free" • Open does not mean free to use anyway you wish • Openness enables us to reuse, recycle, and/or build upon other people's work, materials, & expertise • Openness is the academic way 	<p>1. MERLOT is a free and open online community of resources from around the world to share their learning materials and pedagogy.</p> <p>2. MERLOT is a leading edge, user-centred, collection of peer reviewed higher education, online learning materials, catalogued by registered members and a set of faculty development support services.</p>

Need to initiate OER movement in India especially at School Level

In Dec. 2005 National Knowledge Commission decided to explore opportunities with open education materials in order to understand the implications for extending access and enhancing quality for higher education in India. A number of open education initiatives have been undertaken in the field of higher education like:

1. **National Program on Technology Enhanced Learning.** It is a joint venture by seven Indian institutes of technology and Indian institutes of science and funded by the Ministry of Human Resource Development, Government of India
2. **Ekalavya by IIT, Bombay.**

3. E-Grid, supported by the Human Resource Ministry of the Indian Institute of Information Technology, Kerala

We need to initiate OER movement at school level especially after RTE Act 2009. A lot of teachers need to be trained for achieving the objective of Universalisation of Elementary Education (UEE) as well as Universalisation of Secondary Education (USE). The open educational resources (OER) and open courseware (OCW) are some of the recent innovations that are especially relevant for achieving equitable access to quality education.

How to train teachers to plan and develop OERs?

Teachers can play an important role in initiating OER movement in India. Teacher education institutions must take leadership in this OER movement by training teachers to contribute to OER movement. This training of teachers to develop OERs must be an essential component of all teacher education programmes. Teachers can develop and contribute:

1. Lesson plans, teaching aids, presentations, projects, videos on microteaching skills, videos of simulated classes of different disciplines, need based modules of different subjects etc.
2. With 22 official languages, 200-odd rationalised mother tongues, and no one knows exactly how many minor languages and dialects, linguistic diversity is part of the historical cultural heritage of India. All education is contextualised. Therefore this OER movement can take care of the needs of multilingual Indian children. For instance, if a teacher in Chennai contributes OER regarding a lesson, it is possible for parents and teachers to use it let us say, in a place like Delhi if it is available in Hindi and this Hindi translation can be done while adapting the OER material. So, these OER can be made available in different languages, so as to make the dissemination as well as use possible in different parts of the country. A collaborative effort on the part of the teachers of different states along with language experts is required. Language should not become a barrier as far as sharing of knowledge is concerned.
3. Continuous & Comprehensive Evaluation (CCE) introduced in schools at secondary stage recently in Oct. 2009 has shifted the focus from examination to effective pedagogy. We need to look at the **holistic assessment** of a learner which also includes co-scholastic area of Life Skills, Attitudes and Values, Sports and Games as well as Co-Curricular activities. The CCE scheme aims at addressing this in a holistic manner.

CCE activities in schools can be brought under the OER movement to allow students explore knowledge through various projects conceptualized by teachers. Scholastic assessment can be done by both formative as well as summative assessment. Formative assessment can be done by conversational skills, assignments, oral questions, projects, quizzes and group work. Teachers can help students, parents and other fellow teachers by developing modules on CCE activities; you tube videos

on role-plays (related to curriculum topics), Projects, Quiz questions and bring them under the umbrella of OER movement.

Role of IGNOU and NIOS in Training Teachers for OER movement

NIOS is an open schooling initiative in India and IGNOU is a distance education National University located at New Delhi in India. Let us discuss what role these apex organizations can play in training teachers for OER movement. Open schooling is seen as an alternative to formal educational system (pre university) to achieve the objective of UEE and recently secondary education for all. A National Digital Repository of learning resources is established by the Indira Gandhi National Open University (IGNOU). The repository, eGyankosh, envisages to store, index, preserve, distribute and share the digital learning resources of open and distance learning (ODL) institutions in the country. The repository supports seamless aggregation and integration of learning resources in different formats such as self instructional study materials, audio-video programmes, and archives of radio and television-based live interactive sessions.

Both NIOS and IGNOU can work together for developing OER materials. These materials can be developed by school teachers as well as teacher educators. For developing these materials training workshops of the teachers and educators can be organized. Planned, collaborative and well coordinated workshops can be conducted for training of the selected Master Trainers from different states of the country. These master trainers can then conduct workshops for other teachers. These participating teachers can collaborate with Master Trainers to develop good quality self learning materials. These materials can be adapted as per the needs of the local community.

Summing Up

Teachers are real agents of change. Being a teacher in the knowledge society requires new specific competencies: becoming proficient in use of technology, being able to search good OER materials, use them in teaching-learning process, and being able to develop self-learning materials for learners through collaborative effort. In India, State must provide opportunities to teachers to learn the use of technology in teaching-learning process and to understand the relevance of instructional design for developing self-learning materials. This involvement of teacher educators and teachers in the creation of need based self-learning materials can help in creating a pool of re-usable educational materials to meet the challenges of education for the masses.

Most of the schemes, (let us take UEE, RMSA etc). envisage developing a pool of OER as a knowledge commons so that the objectives of these national schemes are achieved in terms of accessibility, availability and affordability of education. Initiating Indian school teachers in OER movement will serve this purpose.

References

- Daniel, Sir J. (2006). *eLearning and free open source software: The key to global mass higher education?* Malaysia: Commonwealth of Learning. http://www.col.org/speeches/JD_0601eLearningKualaLumpur.htm
- D'Antoni, S (2008), *Open Educational Resources: The Way Forward. Deliberations of an International Community of Interest*. Paris: UNESCO International Institute on Educational Planning (IIEP).
- Hylén, J. (2005). Open educational resources: Opportunities and challenges. *OECD-CERI*. <http://www.oecd.org/dataoecd/1/49/35733548.doc>
- Johnstone, M. and R. Poulin (2002), "What is Opencourseware and why does it Matter?" in *Change*, Vol. 34(4), July/August.
- Johnstone, S. (2005), "Open Educational Resources and Open Content, Background Note", International Institute for Educational Planning, Internet Discussion Forum on Open Educational Resources, Open Content for Higher Education.
- Kobayashi, T. & Kawafuchi, A. (2006a). "Japan Open Course Ware Consortium (JOCW): A Case Study in Open Educational Resources Production and Use in Higher Education". OECD/CERI Report. Retrieved on December 18, 2008
- Keats, D.W. (2003). "Collaborative development of open content: A process model to unlock the potential for African universities," *First Monday*, volume 8, number 2 (February), at http://firstmonday.org/issues/issue8_2/keats/, accessed 6 July 2011.
- Lane, A. (2008). Reflections on sustaining Open Educational Resources: an institutional case study. *eLearning Papers*, Vol. 10, Online: <http://www.elearningpapers.eu> Accessed 10 January 2010.
- Makoshi, N. (2006). "TokyoTech OCW WG and Japan OCW Consortium". Paper given to joint OECD/AIDE conference. Retrieved on July 7, 2011.
- Materu, P. (2004), "Open Source Courseware: A Baseline Study", The World Bank, Washington, DC.
- McAndrew, P. (2006). OpenLearn: Motivation and futures. Retrieved from <http://www.oecd.org/dataoecd/47/13/37667631.pdf> on July 8, 2011.
- MERLOT (2006), "Putting Educational Innovations into Practice", PowerPoint presentation at Second OECD Expert Meeting on OER, Barcelona, 26 October.
- OECD (2006b), "Participative Web: User Created Content", internal working document, OECD, Paris.
- OECD (2007). *Giving knowledge for free: The emergence of open educational resources*. Paris: OECD Publishing.
- Rossini, C. (2010). Access to Knowledge as a Foundation for an Open World. *EDUCAUSE Review*, vol. 45, no. 4 (July/August 2010): 60–68.
- Shuller, T. (2006). Open University UK: Open Content Initiative. OER Site Visit Report. Paris : OECD.
- Siemens, G. (2003), "Why We Should Share Learning Resources", available at www.elearnspace.org/Articles/why_we_should_share.htm.

- Tuomi, I. (2006), "Open Educational Resources: What they are and why do they Matter", October, available at: www.oecd.org/edu/oer.
- UNESCO (2002). 'Forum on the Impact of Open Courseware for Higher Education in Developing Countries', Final Report. Paper presented at the *Forum on the Impact of Open Courseware for Higher Education in Developing Countries*, UNESCO, Paris, 1-3 July 2002.
- UNESCO (2005). Towards knowledge societies. UNESCO world report. Paris: UNESCO, p.5. Retrieved from <http://unesdoc.unesco.org/images/0014/001418/141843e.pdf> on July 8, 2011.
- Werry, C. (2001), "The Work of Education in the Age of E-College", *First Monday*, Vol. 6, No. 5, May, available at: http://firstmonday.org/issues/issue6_5/werry/index.html.
- Wiley, D & Gurrell, S, (2009). 'A Decade of Development', *Open Learning*, vol. 24, no. 1, pp. 11-21.

Role of Open and Distance Learning System in Reducing Stress among the Learners

Bal Krishna Rai* and Oum Prakash Sharma**

*Academic Officer (Hindi), National Institute of Open Schooling, India,
[bkrai@nios.ac.in]

**Director(i/c), National Centre for Innovations in Distance Education,
IGNOU, India, [opsharma@ignou.ac.in]

Abstract

During the past few years it has been observed that a large number of students in the formal system of education have taken drastic steps—even suicidal attempts. Moreover, many of the students who have successfully completed their studies and have joined good organizations are not able to cope with the challenging and difficult situations in day to day life. The main reason of all such unwanted incidents seems to be the faulty education system focusing only on the completion of a programme without bothering for the development of life skills to deal with the adverse situations and failure in life. The fact is that the main focus of all education systems has been to get success in terms of passing the examination for getting a certificate, degree or diploma within the rigid and fixed conditions. Whereas the group of students is heterogeneous having a different pace of learning, different learning abilities, different socio-economic background and individual way of handling the life situations.

The open and distance learning system, because of its inbuilt learner friendly features and flexibilities, has the potential to enable the learners to deal with the challenging and difficult situations and thus help them in reducing stress as compared to their counterpart in the conventional system. Besides highlighting the basic principles and dimensions of stress management, this paper will focus on the features of the ODL system which helps in reducing stress among the learners and also to prepare them to handle the adverse situations in life. It will also highlight the different areas of the ODL system that need to be redesigned so that the teaching-learning and life skill development takes place simultaneously. The related issues and challenges in doing so will also be discussed in this paper

Keywords: ODL, On-Demand Examination, PCPs.

Introduction

During the past few years it has been observed that a large number of students have taken drastic steps—even suicidal attempts. The rigidities of our existing education system, focusing on the examination and certification, create havoc and unnecessary stress among the students for passing the examination rather

than giving them freedom to learn at their own pace, place and time convenient to them. Recently, a student in Kolkata, Rohan committed suicide in the school itself. Another student of IIT, Kanpur also took his life in the hostel. Such incidents put a question mark on the existing system of education which seems to be helpless in checking such increasing incidents. Not only this, many other students who have completed their studies and have joined good organizations, are not able to cope with the challenging and difficult situations in day to day life.

Why can't we think of such an education system which can provide life oriented education, appropriate in terms of learners' potential, abilities, interest and need? Why do we want every child to learn each and every thing which may not be equally important and useful for all? Why do we want all to appear in the examination simultaneously at the fixed time schedule? Does our education system want students to become learned and good citizens or merely degree or certificates holders? Not only educationists all over the country, but even our Human Resource Development Minister has taken it seriously and has initiated educational reforms which are aimed at reducing the unusual pressure among students. These initiatives will certainly be helpful in reducing stress among the children of formal education system. But the open and distance education system, particularly the open schooling system in our country, already has certain inbuilt features which have potential to reduce stress and tension among the students while studying their courses.

Possible Reasons of Stress Among Learners

Before we discuss the potential of the open schooling system in reducing stress, it becomes important to identify the possible reasons of increasing stress among students. It is a fact that one of the main reasons of such unwanted incidents is the faulty education system focusing only on the completion of a programme without bothering about the development of life skills to deal with adverse situations and failures in life. The main focus of all educational systems has been to get success in terms of passing examinations for getting certificate, degree or diploma within the rigid and fixed conditions. Whereas the heterogeneous group of students have different needs, different socio-economic and educational background and have individual ways of learning. Besides, they want to handle the life situations in their own ways. We are teaching them to memorize text books, pass the examination, get a certificate and anyhow, manage to get a job. But we fail to develop life skills on how to cope with failure, adverse situations, and manage other challenges of life. It is generally assumed that adverse life events or challenges cause stress. If this stress becomes very chronic, it leads to stress related diseases and sometimes suicidal attempts by the students. There are some other reasons also which lead to stress among learners. Some of such reasons are:

- The rigidness of the existing education system, leaving less choices for the learners and the time bound examination system, are the main reasons of increasing stress and fear among the learners. The increasing

peer pressure and uncertainty of career also add to the stressful conditions. Hardly any attention is given on life skill development to deal with such adverse situations.

- Apart from the faulty system of education, another root cause of stress among students starts from home. Sometimes the negligent behaviour of parents and their high expectations from their wards in terms of academic achievement, proves to be the main cause. In some cases deprived childhood and growing up tension also lead to stress. The increasing demand for family responsibility along with studies, also causes stress among the students.
- In addition to the above, the fast changing societal needs and the rat race to win the competition for more and better opportunities also creates stress and maladjustment in the society.

Stress Management Among he Learners

Basically stress is due to our physical, mental, and emotional response to various demands, changes, events in our life. Stress symptoms begin to manifest themselves when we perceive or feel that life demands are exceeding our ability to deal with them. According to Anandi Iyer, "Stress occurs when you are not capable of handling a given situation". Janki Chopra of Vedanta institute said that stress is an agitated mind, a state that is caused by unfulfilled desires. In case of students also, there are several situations in which the students feel helpless and they are not able to handle them properly. As mentioned above, there are several reasons of stress among students where they need support and guidance for how to cope with stress. Stress management is a collection of skills, tools, and techniques that help a person to reduce, manage and even counteract the negative side effect of stress. There are four main strategies for stress management:

1. **Providing Stress Free environment:** Changing the environment is one of the important aspects of stress management. It is a tried out fact that a well organized and calm environment can help reduce stress level and improve productivity.
2. **Changing Direct Response To Stressors:** Managing the reaction to various stressors is also an important stress management strategy.
3. **Changing attitude and perceptions:** If one is not able to manage stress directly, then the next best thing is to change one's mindset and to view the situation in a positive way. People need to understand thought patterns, examine beliefs and attitudes, in order to change their own attitude and perception, which will lead to stress resiliency.
4. **Recover from stress:** There are a number of ways to combat the effects of stress. Many people use specific relaxation techniques including yoga, meditation and breathing techniques. Other people prefer to participate

in their favourite games and sports to spend excess energy and to divert their stressful mind. A healthy diet is also important in reducing stress.

Keeping in view the above mentioned four strategies of stress management, the increasing problem of stress among students can be reduced by:

- providing stress free learning environment,
- providing life oriented education as per need and choice of the learners,
- providing freedom of pace, place and time for learning,
- giving less emphasis on examination,
- developing Life Skills among the learners,

ODL for Stress Management

The open and distance learning (ODL) system, because of its inbuilt learner friendly features and flexibilities, has potential to enable learners to deal with challenging and difficult situations and thus help them in reducing stress as compared to their counterpart in the conventional system. ODL system has the potential to bring education to anyone, anywhere, at any time in a stress free learning environment. Because of its learner friendly features and flexibilities, its relevance in the present circumstances has been recognized by a large section of society. Particularly at school level, many of those learners who are not able to cope with the formal system of education, are pursuing their education through ODL system.

National Institute of Open Schooling (NIOS), an autonomous organization under the Ministry of HRD, is catering to educational needs of the deprived sections of society like out of school children, the marginalized groups of boys, girls, women, adults, working people, handicapped and the disadvantaged social groups who face different financial, social, emotional or other types of stress and miss the opportunities for availing school education.

Let us see how the open and distance learning system is helping students in learning in a fearless and stress free environment.

1. Providing Stress Free Learning Environment

21st century has drastically changed the learning environment and consequently educationists in India are trying to transform the existing methodology of teaching-learning, accordingly. The main focus is on providing education of that kind which can reduce the prevailing stress, especially among school going learners.

The open schooling system offers an open entry to all interested and motivated learners. Besides, availability of variety of subjects and much greater flexibility in the choice of subjects to suit personal needs and requirements, provide a stress free learning environment for the learners. Multimode instructional system, including self instructional study material, audio-video programmes and face to face contact programmes at the

study centres also help in learning effectively. Modular approach to learning and continuous assessment through tutor marked assignments are some of the factors which help in providing a better learning environment.

2. Providing life oriented education as per need and choice of the learner

Education is not merely getting information and acquiring bookish knowledge, it is a life long process for self development. Unlike the conventional system, NIOS focuses on learner centric education by providing life oriented education as per the need and choice of learners. The curriculum is designed in such a way that it helps in all-round growth and development of the learners. There is no rigidity of choosing a particular combination of subjects as in the case of formal system of education. Learners can choose any subject combination for their studies as per their interest and needs. This feature of NIOS not only helps in reducing stress among learners but also encourages them to complete their studies.

3. Providing freedom of pace, place and time for learning

We know that the existing formal system of education has several good features but its rigidity in terms of completing a course in a fixed time frame, bound and confined structure at specific places makes it stressful for learners. It is estimated that because of these factors about 30 % children are deprived of the mainstream of education system. But because of inherent flexibilities of the ODL system (such as any-time any-where education, no compulsion to attend the PCPs, many attempts to appear in an Examination, Credit transfer, Credit accumulation, On-Demand Examination), this system has emerged as a system of education, learner friendly and stress free popular alternate.

4. Giving Less Emphasis on Examination

In the formal system, examination is considered to be a necessary evil leading to phobia. Learners become afraid of examinations and instead of learning for life they learn for examinations. Majority of the reported cases of suicide and stress related problems among the learners are due to the examination. Because of such incidents the government as well as educationists are in favour of eliminating the examination completely. But practically it is not possible to do away with examination and evaluation. Therefore, now there is emphasis on examination reforms in the education system so that evaluation becomes a continuous process and the students can appear in the examination as per their preparation.

Fortunately, the ODL system has already been providing the facility to appear in the examination as per the preparation and need of the learners, Besides full-fledged examination in a year, NIOS offers on demand examination also, ensuring minimum stress and pressure on the students. NIOS has designed a flexible scheme of examination where a learner

could take the examination at a time in one or more subjects. Their credits are accumulated and as soon as a student attains requisite number of credits, he/she becomes eligible for certification. Not only this, the transfer facility of the subjects passed from other recognized boards is also provided equal weightage. This also proves to a credit factor for reducing stress among the learners.

5. Developing Life Skills Among The Learners

In the present scenario, it is a fact that whatever change we bring in the teaching-learning system and provide any type of flexibility, it may not be sufficient unless we develop life skills among the learners. Besides curricular instruction, life skills need to be integrated in the education system of India. Life skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges that facilitate the physical, mental and emotional well-being of a child. The government of India has adolescence education programmes in all secondary and senior secondary schools. Global and Indian experiences have shown that educational interventions that focus on life skills development have proven to be very effective in empowering adolescents to manage their AHI and concerns.

It is a fact that when students acquire knowledge about life skills, their attitude changes positively, they start thinking critically and creatively, communicate effectively, build healthy relationships, empathize with others and develop the ability to cope with adverse situations. It helps them to manage their lives in a healthy and productive manner. Such knowledge and skills can lead to positive behavioural changes and enable young people to play leadership roles. Moreover, life skills imparted to the students are likely to be passed on to their own children, thus influencing future generations.

NIOS, in collaboration with the UNFPA, is contributing towards empowering the adolescents enabling them to make informed choices in their personal and public lives. This is achieved by providing learners information, life oriented education and services in a supportive environment, so that they can learn through their experiences and build their skills for facing the challenges of growing up.

In order to enhance the life skills, different types of interactive methods are used that make learning meaningful, relevant and interesting. Some common methods are group discussions, brainstorming sessions and role-playing, quiz and case studies etc.

Conclusion

Conclusively, it can be said that any education system that becomes a cause of stress among students, needs to be revamped. Why should we force a child to study a combination of subjects which is not of her/his interest and use! There is a need to bring changes in the existing system where the learning

time, learning style, the pace of learning, and the evaluation system is such that it does not create any pressure and stress on the learners. The open and distance learning system, particularly at the NIOS, has tried and tested flexibilities in the teaching-learning and evaluation system and found that hardly any such untoward incident, like suicide has happened. Therefore, it is suggested that the entire education system, including the formal system of education, may provide a flexible and learner friendly education system which causes little stress among the learners. The focus of education should be on life skill development rather than making the children bookworms. The learners should be made capable of using their potential and capabilities for a happy and stress free life. For this they should be provided with an open and free environment at home as well as in the school.

References

- Stress Management: [http:// www.timethoughts.com/stress/ stress management.htm](http://www.timethoughts.com/stress/stress_management.htm).
- Causes of Stress on students by Anna Hart <http://www.stress management blog.com/can/cause of stress>
- Stress management, [http://helpguide.org/mental/stress_ relief_ coping.htm](http://helpguide.org/mental/stress_relief_coping.htm)
- Quality School Education through Open and Distance Learning (ODL): M.C Pant EX CM ,NIOS, India
- Quality Assurance in Open and Distance Learning in India by S K. Gandhi , Symbiosis Center for Distance Learning India.
- Adolescence Education Programme Facilitators Hand Book-AEP Package developed by CBSE (Central Board of Secondary Education) India.
- Yuva Material, Developed by the Department of Education, Govt. Of Delhi.

Exploring involvement of Civil Society Organization in Open Schooling in India: A Partnership Perspective for Achieving Gender Equality in Secondary Education

Sukanta Kumar Mahapatra

National Institute of Open Schooling, India, [Sukanta.dse@gmail.com.]

Abstract

The purpose of the article is twofold. Firstly, to present how gender equality in education is important for society and how the gender gap does exist in school education particularly in the open schooling system and secondly, how civil society as a third sector of society can help to bridge the gap in education system drawing the successful practices both from formal school system and open school system.

Keywords: Gender Inequality, MDG, Civil Society, Partnership, Social Capital, Open Schooling

Introduction

Education has long been one of the most decisive of our life choices, the key to opportunity and ladder to advancement. Without education and especially without equal educational opportunities of skills and qualifications, men and women alike, of certain classes and social groups over the years, have been condemned to inferior status, especially in their personal development, in their choice of work as citizens and in their power to influence government and work. The evidence is overwhelming that education improves health and productivity and the poorest people gain most. When the schools opens their doors wider to girls and women as well as boys and men, the benefits multiply. Indeed failing to invest adequately in educating women can reduce the benefits of educating the men. Thus Gender equality in education has greater rationale for wider social justice and welfare of the humanity (Unterhalter, 2002)

Gender inequality in education has both intrinsic and instrumental value. On the intrinsic aspects, if our concern is with aggregate wellbeing as measured, for example, Sen's notion of capabilities (Sen, 1989), then we should view the important capabilities of education as a critical constituent element in wellbeing of the people. Sen argues for the intrinsic importance of gender equality in education; firstly, because it helps establish condition in which wider capability is set, is available to both boys and girls; secondly, because it alerts us to differential conversion process linked to gender and other social divisions with regard to how resources are utilized to establish the capability set; and

thirdly, because of the importance of gender equality in basic education in preventing human insecurity and establishing condition for capabilities and freedom.

Apart from the intrinsic aspects, one may be concerned about the instrumental effects of gender equality in education. Gender equality in education facilitates the prospects for child mortality, fertility and nutrition as well as education gains of the next generation. To the extent, the linkages exist, gender inequality in education has to be curbed out otherwise it may generate instrumental problems for development policy as it compromises progress in other important indicators for social prosperity of a nation. Secondly, gender equality in education has a better effect on economic growth. This is an important issue to the extent that economic growth furthers improvement in well-being, has been demonstrated in many times.

Given these arguments in gender equality in education, large scale initiatives have been undertaken through out the world to close gender gap in education. While there has been a clear trend towards gender equality in education since 1970, the gain has been slow and uneven for the poorest regions. As a result of these persistent gaps, the world community pledged at the Millennium Summit to promote gender equality and empower women, with particular emphasis on gender inequality in education. The Millennium Development Goals (MDGs) adopted in 2000 at UN Millennium Summit still a major component of global and national strategies for economic and social development, have gender Parity in school as the first target to be met by 2005 and the second target is that by 2015 all the girls and boys will complete a full phase of primary education. These goals have developed from 1990 Jometin World Conference On Education For All(EFA) and expanded in the follow-up World Education Forum(WEF) held in Dakar 2000. This entails that by the year 2005, all the children of primary school age should be entering school to complete primary and secondary school by the year 2015. These targets for gender equality in education have been set with earlier dates of than all other MDGs(which are prone to be achieved by 2015) because education generally and gender equality more specifically are seen to underpin the achievement of all other Millennium Development Goals(MDGs).

One estimates of world bank says that by 2005 the countries which are off-track are likely to suffer 0.1-0.3 percentage points lower per capita growth rates, as a result, will have 0.1-0.4 more children per woman and by 2015, an average of 15 per 1000 higher rates of under-five mortality and 2.5 percentage points of higher prevalence of underweight children under five (World Bank, 2004) The importance accorded to gender equality in education in the MDGs have implication for it's position in the international architecture of global strategizing. The MDGs form the counter-piece of UN decade of Education for Sustainable Development (DSED) which runs from 2005-15. Currently, initiatives are undertaken both nationally and internationally to take forward the Decade of education for Sustainable Development and thus gender equality

in education as an idea and practice has been in the forefront target of the policy makers and practitioners in both developing and developed countries. (UNESCO, 2006)

In order to address these global concerns, no doubt since independence, more specifically after world declaration for Education For All (EFA), 1990 several central and state initiatives have been targeted in India to realize the goal of Universalization of elementary education. Although these efforts have brought significant improvements in girl's education, still stark gender inequality prevails in primary and secondary education, which was to be achieved by the year 2005. Despite the reported increase in gross enrolment, estimates still show that there were 76 lakh out of school children in the 6-14 age groups, out of which more than half are girls. Even among those who enroll, completion rates have been very low, especially among girls. These disparities justify that goals cannot be achieved unless specific and vigorous initiatives are put in place. While there are series of socio-cultural problems that inhibit the formal schooling of the girls, Open Schooling system may be considered as a viable option to strengthen schooling of these disadvantaged girl children.

Seeing the current stands of Indian education system, it doesn't seem comfortable that only state-led intervention won't suffice the argument to achieve the goal within proposed timeframe. Rather multi-dimensional and cross-sectoral interventions are required to scale up these efforts. Thus, it is most desirable that civil society as a potential partner needs to be involved to address the pressing challenge of gender equality in education. In the whole discourse of this paper, civil society intervention has been highlighted to show how it can be strengthened for achieving gender equality in education, particularly in open schooling.

Five sections of this paper complement to each other, though there is some overlapping over one another. A short description of civil society as a development partner is the focus of the second chapter while in the third chapter, the role of civil society in India has been discussed within the role framework of service provider, innovators and as informed critics and Advocates and taking various case studies from secondary sources... The framework of service provider-innovator-informed critics and advocates has the advantages of comprehensiveness, precedence and simplicity to show how it has the greater rationale of leveraging girl's education. The fifth section presents different challenges that CSOs face if resolved, they may yield as good asset to complement the states' effort to achieve the target. Finally the last section concludes with suggestions for future research and educational policies to scale up efforts for Gender Equality in education.

Partnership with Civil Society - A developmental approach in Education

Civil society is not a new phenomenon. The concept held its origin in the classical period, used as a synonym to good society (Edwards 2004:6). However, in 1990s with the emergence of the non-governmental organizations and the New Social Movements (NSMs) on a global scale, civil society as a

third sector became a key terrain of strategic action to construct 'an alternative social and world order.' civil society refers to the arena of uncorked collective action around shared interests, purposes and values. In theory, its institutional forms are distinct from those of state, family, market, though in practice, the boundaries between states, civil society, family and market are often complex, blurred and negotiated. Civil society commonly embraces a diversity of spaces, actors and institutional forms, varying in their degree of formality, autonomy and power (Oommen, 2004). Civil societies are often populated by organizations such as registered charities, development non-governmental organizations, community groups, women's organizations, faith-based organizations, professional associations, unions, self-help groups, social movements, business associations, coalitions and advocacy groups.

But in the context of education for All (EFA) efforts, civil society can be understood as all non-governmental and non-profit associations involved in education, it embraces groups such as campaign networks, teacher unions, religious organization, community associations, research networks, parent associations and professional bodies, student organizations, social movement and others (UNESCO, 2000)

Rationale

Accelerating progress on girl's education is an urgent necessity at the moment which needs mobilizing greater amounts of political will and capacity building. Therefore, civil society as a third sector has to play a greater role. There are several validations in the argument of civil society involvement to achieve gender equality in education. Firstly, if particular group of learners are excluded from the present point of access, then Education for All (EFA) and Millennium Development Goals won't be met. Among the out-of-school children, two-thirds are girls which include many marginalized and excluded groups. This requires a concerted focus and attention on the part of civil society to cater to the need of excluded groups. This goal almost can't be achieved and won't be sustained without such policy focus.

Secondly, civil society isn't a homogeneous entity- it includes a diversity of development organizations, media, consumers and business associations, religious groups even fundamentalist forces. Thus, multi-sectoral approach of these development organizations provides spaces which house a mélange of different projects taken by the respective blocks will help to intervene the education of these excluded groups in a better way.

Thirdly, planning and policies are always done generally instead of specific mechanism to arrest the need of specific groups. But as far as the socio-geographical diversity is concerned, there are many inter-regional and nomadic groups in India, who feel themselves isolated to the curriculum and school timings. In this context, civil society as partner should challenge, influence and lobby government to bring flexibility in the plans and policies.

Fourthly, civil society as a key agency in building social capital has a greater rationale closing gender gap in education. Networking and interdependence are integral part of any community development process. This can help in optimum and effective utilization of services and can help in widening the scope for the people and also can use the potential of the community for their own development.

The participants of the Dakar Forum also commit to encourage civil society participation in the monitoring and implementation of strategies for educational development. The Dakar Framework for Action states that, in order to “achieve these goals, we government, organizations, agencies, groups, and associations represented at the World Education Forum pledge ourselves to: ... (iii) Ensure the engagement and participation of civil society in the formulation, implementation, and monitoring of strategies for educational development” (Dakar Framework for Action Article 8, World Education Forum, 2000b).

Civil Society Partnership and Gender Equality in Elementary Education

UNESCO lists three major roles of civil society as **service providers**, **innovators** and as **informed critics** and Advocates. **Since** the role framework of service provider-innovator-informed critics and advocates has the advantages of comprehensiveness, precedence and simplicity, analysis will be done on the basis of this organizational framework. These three roles are- **Service providers** where state provisions are absent or insufficient. These roles include facilitating in community participation, empowerment, literacy, community schools and early child school education particularly valued.

Innovators and source of new thinking and practices- where these institutions have to evolve new strategies that will be much more helpful to respond change.

Informed critics and advocates on the whole range of development issues. NGO campaigns at national, regional and international levels are lobbying in favour of free and compulsory quality education of children, youth and adults constitute this category. (UNESCO)

CSOs as Service Provider :Scaling Up School Services

Increasing enrollments at the primary and secondary level require increased physical infrastructure in school premises. But still studies reveal that grossly inadequate educational input is one of the main problems facing Indian education. Though it is assumed that as the country has more resources now than before, more funds be available for education but there is a reverse trend. The share of GDP in education has come down from 3.77% in 1999-2000 to 3.74% in 2004-05 of the total public expenditure. On the other hand, open schooling being considered as a second and alternative option by the government, often gets less funding from the governments. Given funding constraints, it is essential to think creatively to find solutions such as forging partnerships with the private sector and using existing infrastructure in “shifts” to deal with the provision of adequate infrastructure. The forging partnership

of NIOS with The Rajasthan Council of Elementary Education, Jaipur (Raj) can be cited as a good example. The Rajasthan Council of Elementary Education, Jaipur (Raj) earmarked specific Kasturba Gandhi Balika Vidyalayas, Raj (KGBVs) the residential schools under SSA for girls, where they would like to impart skill training free of cost to the girls enrolled with them 138 KGBVs have already applied for the accreditation to NIOS for the trade Cutting, Tailoring & Dress Designing (NIOS, 2011).

Similarly, Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi, a part of Commonwealth of Learning created by commonwealth Heads of Government to encourage the development and sharing of open learning and distance education knowledge, resources and technologies to address the developmental needs of commonwealth countries is one of the quality partnership in open and distance learning in India. Apart from the important objectives of having a collaboration with NIOS to expand the scope and improve the quality of learning by using new approaches and technologies in the area of Open and Distance Learning (ODL), CEMCA also fund the female learners in encouraging girls and women, included in the target group of NIOS, to pursue higher education in emerging areas of media/technology, thereby strengthening the NIOS.

Objectives of providing greater equity and justice in society and evolving an inclusive learning society. CEMCA awarded five female students who topped in Media and technology related subjects in NIOS examination conducted in April'2011. (NIOS, 2011)

Community Mobilization to ensure better services

Local **community mobilization** involves immediate beneficiaries and under-represented groups (especially women) in decisions of service delivery. Several examples of successful community engagement offers lesson for programmes design. Badlao Foundation, established in 1982 has been working in the education sector for many years. The strategy has been to form Mahila Sabhas (Women's Groups) and involve them in organizing, implementing and monitoring education programmes. Badlao Foundation has been appointed as a nodal agency in the four districts of Jamtara, Pakur, Dumka and Sahebganj in Jharkhand for promotion of community participation and strengthening of Village Education Committee and community monitoring under Sarva Shiksha Abhiyan (SSA). They enroll and retain at-risk children, especially girls, in alternative education centers and make efforts to mainstream them to formal schools. It enhances the quality of education and makes links to vocational education. Other major activities include developing culture specific teaching-learning material, upgrading the quality of existing TLM and education awareness among the local community. The NGO is accredited to conduct NIOS examinations up to the secondary level. Badlao Foundation has developed innovative methods for imparting education such as by developing primers in tribal languages. Till 2011, 25 girls have successfully completed their 10th class

through NIOS and 37 of them are pursuing secondary education through National Institute of Open schooling.

Capacity Building

Capacity building at every level is required in order to improve girl's better prospect for education. No doubt, for each Indian school, a school committee with more representation of women is existence but when it comes to function, very few cases may match to the role expectation. Girl's and women's need should be put at the heart of all the processes if the situation is to be improved and not worsened by the catastrophe, where civil society organization can play a positive role. Mahila Samakhya experience shows that capacitating community members, most specifically of adult women has shown a lot of potential in it's argument for girl's education. It is said that in all the Mahila Samakhya areas, enrolment of girls has gone up and women tookup keen initiatives in the functioning of primary schools.

An UNFPA-MHRD supported programme "Adolescent Education Programme" towards creating an environment for much needed peer interaction with comfort, accurate information and able guidance for young learner with special focus on girls is a promising step for gender equality in education. Along with its mission to work for learners to hone various skills such as self awareness, critical and creative thinking, communication skills with gender sensitiveness in its approach, various capacity building workshops are also held for tutors to sensitize and train them to transact the life skills through various methodologies included in the self-learning materials.

Innovators and Source of New Thinking

Credibility of the innovation and it's social acceptance are the key necessity for bringing changes in the policies and pedagogic skills changes in the curriculum framework as well as new tools of advocacy for future policies and perspective. Not only NGOs but various research groups and parent groups are also taking steps to scale up the efforts that can be used in the respective regions as a model. Sahaj Seva Samsthan, an NGO in northern India, through its institution, looks after the requirements of children with Special needs (Slow Learners), who are unable to study in normal schools, who are repeated failures in normal schools, and who are school drop-outs. They identify specific problems which are impeding the child's learning and devise methods and methodologies to overcome the reading and writing problems of each of the individual children. Apart from reading and writing, Skill training (vocational training) is also planned as a part of learning and future rehabilitation and at last, make them appear for exams conducted by District Board/ National Institute of Open Schooling(NIOS).Drawing the case study of Akshay, who has joined the school at the age of 12 years, he studied up to 5th class in a normal school with failures in 2nd and 5th classes. He had reading ability, hyperactivity, disobedience, short-tempered nature, was talkative and lacked interest in studies with excessive imagination. With these problems he was

unable to continue in the normal school. But after 6 years of study in Bodh school, Akshay cleared his secondary level examination (equivalent to X class) conducted by NIOS. Now he is pursuing his graduation in Bhavan's college, Hyderabad, India. Now he is found to be a well mannered, confident youngster who drives his own car and helps his father in running his Chit fund finance company. He is able to carry on independently and confidently the business activities like handling money, interacting with the customers intelligently and is responsible for collections every day (Sahaj Seva Samsthan, 2011).

An assessment of strength of programmes and policies provide enough scope for planners and policy makers to formulate appropriate responses for effectiveness of schooling. Detailed situation of analyses of the plight of schooling and its root and proximal causes are vital components to statistical information. Studies that are based on direct experiences of individuals are particularly valuable. Lessons learned from the experience of some projects of one region can be integrated with accurate local knowledge, state policies to produce more effective response. For example, Mid-day meal scheme initiated by some local NGOs in Tamilnadu has become so successful that it has now become a national campaign.

CSOs as Advocates and Informed Critics

Civil Society advocacy can highlight development challenges existing in education and can put pressure on government to address the goal such advocacy is critical for achievement of goal and many successes show how it can be done. For example, Mid-day meal scheme, which is now conceived as more successful programme for higher participation of children in school, was the result of Right to Education campaign launched by some NGOs in India.

Similarly, Tamana, a non-profit NGO, especially for multiply challenged and autistic individuals in special consultative status with United Nations Social and Economic Council is one of the creative partnerships with National Institute of Open Schooling for providing education for differently abled children. Tamana worked on special curriculum with its course coordinator, which was put into practice after Tamana received the status of Special Accredited Center. Initially, Tamana started educating disabled and disadvantaged learners at Open and Basic Education (Level A & B). Now, Tamana is also running classes at the secondary and senior secondary level. Now, it has put into its policy that learners from other schools also can apply for the courses at Tamana. Students are first assessed by special educators of Tamana to assess their readiness for education in NIOS, which mightn't be an easy task for NIOS (Tamana, 2012).

It is also essential that along with public advocacy, civil society actors should participate in the design **and implementation of policies** which can provide justice to the learners of marginalized section of society. The evolution of COMOSA as a non-profit and collaborative organization in the field of open and distance learning is a milestone with the vision of development of open

schooling as a means of providing educational opportunities for all, COMOSA is established with the objective to cooperate and collaborate in development, promotion and introduction of innovative, high quality, relevant, equitable, gender-sensitive and cost-effective programmes of school education for sustainable development in commonwealth countries through Open and Distance Learning Mode, and thereby targeting to achieve the Millennium Development Goals (MDG) of the United Nations (COMOSA, 2011)

In sum, achieving the goals within countries will require active national civil society involvement with corporate sectors, various women groups and Panchayats through raising awareness about open schooling system and particularly the facilities for girl's education, by highlighting priorities through dialogue and consultation - designing strategies, by identifying the challenges and constraints, effective implementation plans and national and local budget priorities contributing to scale up open school resources through using skills in community involvement, capacity building, strengthening governance process and service provisions - evaluating performance of open schooling system by participating in national reviews, policy planning, budget tracking and auditing.

Challenges within and out-side

No doubt, in recent years, Many civil society organizations have come forward to promote their action to address the gender equality in education. Some organizations work with government collaboration and some others work with other international agencies. With a dramatic increase in the number of civil society organizations, one might assume that better representation will follow automatically. This is unfortunately not the case. Some organizations especially, the newer NGOs often lack the requisite qualification and experience necessary to play an effective role. Many lack the requisite qualification and experience necessary to play an effective role. Many lack the financial and legal resources. Some operate within rigid governmental and administrative structure that offers little opportunity for civil society participation.

Lack of funding is also another major constraint for the development of an effective civil society to intervene for this goal. Though SSA has given some space for Civil society organizations but the fund in itself is not sufficient to support these activities. Civil society Organizations that are better organized and have stronger links to government and international organizations are generally more successful in competing for the limited resources despite the fact that similar problems prevail in other regions. Better co-ordination and networking are needed if scarce resources are to be distributed efficiently.

Though NGOs and CSOs activities in basic education are based on expanded view, as demonstrated by the levels of integration and articulation with other sectors there were very few organizations that reported programmes exclusively in education. *many have formed* partnership with women groups or have developed women's projects. However, description of work with in

these areas was significantly gender blind that is not sufficiently explicit about the existing or potential male input.

V

Looking Forward

Civil society partnership has to play an effective role to play for wider goals of gender equality in education. Equality in terms of quantitative figure doesn't suffice the argument of equality rather qualitative and meaningful participation in education in terms of its equality dimension much needed for wider achievement of the goals. Unless civil society actors fully involve them in the affairs of education, it is less likely that the goal will be fulfilled within the proposed timeframe. Therefore, better integration is needed between international, national and local initiatives. The essentials of gender inequality in education need to be incorporated in the heart of the community. These changes should concern not only intergovernmental organizations but also international NGOs as well. There is growing need of professional community workers with gendered approach that helps support, participation and engagement of community. NGOs should focus more on partnership and collaboration within the sectors than on the promotion of their own interests, which is often the case. Greater mentoring and horizontal networking with women groups, be it academic or professional groups, is required. Last but not the least, government and civil society should create a collective decision making structure at each level of education.

References

- Government of India (2004). Chapter on Elementary Education (SSA & Girls Education) for the XIth Plan Working Group Report, MHRD: New Delhi
- Government of India, Involvement of NGOs in SSA activities http://ssa.nic.in/planning/revised_final-%20ngo.pdf, downloaded on 12th September'2008
- Govinda, R (2002). India Education Report: A Profile Of Basic Education. New Delhi: Oxford University Press
- National Council for Educational Research and Training, (2005). National Curriculum Framework (NCF). New Delhi: NCERT
- National Institute of Open Schooling (2011) NIOS profile. 2011: NIOS: Noida
- Oommen, T.K. (2004) Nation, civil society and Social Movements, Sage Publication: New Delhi
- PROBE (1999) Public Report On Basic Education In India, Oxford University Press: New Delhi
- Ramachandran, V. (2004) Gender and Social Equity in Primary Education: Hierarchies Of Access, Sagepublication: New Delhi
- Ramachandran, V. (2004) Getting children Back to School: Case Studies In Primary Education, Sage Publication: New Delhi
- Rao, N. and I. Smith (ed) 2005 Partnership for Girls education. Oxfam G.B.: London

- Sahajsevasamsthan(2011)Bodh School.<http://www.sahajsevasamsthan.org/Educational/Bodh.htm>.accessed on 11th February'2011
- Tamana (2012) National Institute of Learning for Special Individulas.Tamana: Delhi. <http://www.tamana.org/NIOS.aspx> accessed on 20th January 2011
- UNESCO (2003) Gender and Education for All: Leap to Equality, EFA global monitoring Report
- UNESCO (2003), Different approaches for Achieving EFA: Indian experience: UNESCO: Paris
- UNESCO (2005) Scaling up good practices in Girl's education, UNESCO: Paris
- UNESCO, A Scorecard on gender equality and girls' education in Asia 1990. unesdoc.unesco.org/images/0013/001394/139426e.pdf, Downloaded on 19th January' 2011
- UNICEF (2005) The state of World's Children'2006: Excluded and invisible, UNICEF: New Work
- Unterhalter, E. (2007) Gender, Schooling And Global Social Justice, Routledge: New Work
- Wazir, R. (ed) 2000: The Gender Gap in Basic Education: NGO as change agent, Sage publication: New Delhi

Note for Contributors

The articles for COMOSA Journal of Open Schooling should provide useful information about Open Schooling system. In order to ensure the quality and standard of the articles/papers, the received articles/papers are reviewed by a panel of experts in the field of open and distance education and only the selected articles/ papers are considered for publication in the journal. If the article is print worthy with certain modifications, the author may be asked to do the needful.

Format of the Paper/Article/Research Report for COMOSA Journal

Depending upon the nature of contribution, the following formats may be followed:

a) *Articles/Papers in Open and Distance Learning (ODL)*

1. Abstract, Keywords (in about 100-150 words in a separate page (A-4 size).
2. Title
3. Author's Name, Address in the footnote of the first page.
4. Introduction/Context
5. Sub-items with headings relating to:
 - Field Situations/Scenario
 - Emerging Issues, sub issues
 - Critical analysis
6. Innovative initiatives to address the problems, implications for ODL in the country's context/context of other countries, action points (if any)
7. Conclusion
8. Acknowledgements (if any).
9. References in single space (the detailed about format is given separately)

b) *Case Study Reports in Open and Distance Learning (ODL)*

1. Abstract, Keywords (in about 100-150 words in a separate page (A-4 size).
2. Title
3. Author/Name of Institution/Organisation/Country/Year of study in the footnote of the first page.

4. Introduction/Context
5. Objectives
6. Description of the case, methodology, quantitative/qualitative aspects, critical analysis, comparison of the case study with other countries in the concerned area.
7. Special Features/Innovative Initiatives/Success Points
8. Conclusion – Implication and needed follow up, replicability,
9. Acknowledgements (if any)
10. Reference

c) *Research Papers in Open and Distance Learning (ODL)*

1. Abstract, Keywords (in about 100-150 words in a separate A4 size) paper
2. Title
3. Authors name, address in the foot-note of the first page.
4. Introduction (Context/Rationale, year of study, Institute/ University including country/countries)
5. Objectives of the Study
6. Sample Size, Sampling Technique
7. Study Tools
8. Methodology
9. Results (data processing, analytical presentation including statistical treatment, quantitative and qualitative analysis, tables, diagrams, graphs with captions).
10. Conclusion - major findings, implications, needed follow-up action, suggestion for further research in the area.
11. Acknowledgements (if necessary)
12. References in single space (Details about Format given separately).

References

A reference list should contain only references that are cited in the text. For maintaining a standard for writing references to a book, chapter in a book, article from a journal following style should be followed:

For books : Bobrow, D.G., & Collins, A.M. (Eds.), (1975). *Representation and understanding: Studies in cognitive science*, New York: Academic Press.

For articles : Frase, I.T. (1968). Questions as aids to reading: Some research and a theory. *American Educational Research Journal*, 5, 319-322.

If the reference is a policy document of any Government/International Document, it should be written as follows:

Commonwealth Secretariat (2000) *Education in a Global Era: Challenges to Equity, Opportunities for Diversity-Issue Paper*, London. Fourteenth Conference of Commonwealth Education Ministers, Halifax, Nova Scotia, Canada, November 2000.

Title of Books/Journals should not be abbreviated and it should be in italics.

Length of the Research Paper/Articles etc.

Research Paper : 3500-7000 words, Article : 3500-7000 words,

Book Review : About 2000 words, Research Review : About 2000 words

Kindly send Articles/Reports in A-4 size bond paper with appropriate margin along with a floppy (in MS-Word or Page Maker format) or through E-mail comosa@nios.ac.in

Editorial Correspondence

All communications related to publications should be addressed to:

The Chief Editor, COMOSA Journal of Open Schooling, National Institute of Open Schooling, A-24/25, Institutional Area, Sector-62, NOIDA-201309, Uttar Pradesh (India)

**COMOSA Journal of Open Schooling
(COMOSA)
ISSN 0976 – 0407**

ORDER FORM

1. Name :
2. Organization :
3. Address :
(including Name of
City, State, Country
and Pin/Zip Code)
4. Telephone (with ISD/ :
STD Code)
5. Fax (with ISD/STD :
Code)
6. E-mail :
7. Payment :

The Subscription fee is as follows:

	Within India	Outside India
For Individuals	Rs. 400/-	\$ 30
For Institutions	Rs. 1000/-	\$ 60

COMOSA offers 10% discount on subscription for three years and above.

Select the convenient way to pay

- I enclose a Demand Draft payable to **Commonwealth Open Schooling Association**, for Rs/\$ bearing No. Dated drawn on Bank.
- Please invoice my organisation for Rs./\$
Subscription for the Year

Signature:

Date:

Mail filled in Subscription Form to:

**The Editor
COMOSA Journal of Open Schooling,
National Institute of Open Schooling,
A-24-25, Institutional Area, Sector-62,
NOIDA-201309, Uttar Pradesh (India)**

Continued from inside front cover

Copyright

© Commonwealth Open Schooling Association and authors of individual papers. The authors are responsible for copyright clearance for any part of the contents of their articles. The opinions expressed in the articles of this Journal are those of the author and do not reflect the object of opinion of COMOSA.

Note for Contributors

The articles for COMOSA Journal of Open Schooling should provide useful information about Open Schooling system. In order to ensure the quality and standard of the articles/papers, the received articles/papers are reviewed by a panel of experts in the field of open and distance education and only the selected articles/ papers are considered for publication in the journal. If the article is print worthy with certain modifications, the author may be asked to do the needful.

Format of the Paper/Article/Research Report for COMOSA Journal

Depending upon the nature of contribution, the following formats may be followed:

a) *Articles/Papers in Open and Distance Learning (ODL)*

1. **Abstract, Keywords (in about 100-150 words in a separate page (A-4 size).**
2. Title
3. Author's Name, Address in the footnote of the first page.
4. Introduction/Context
5. Sub-items with headings relating to:
 - Field Situations/Scenario
 - Emerging Issues, sub issues
 - Critical analysis
6. Innovative initiatives to address the problems, implications for ODL in the country's context/context of other countries, action points (if any)
7. Conclusion
8. Acknowledgments (if any).
9. References in single space (the detailed about format is given separately)

b) *Case Study Reports in Open and Distance Learning (ODL)*

1. **Abstract, Keywords (in about 100-150 words in a separate page (A-4 size).**
2. Title
3. Author/Name of Institution/Organisation/Country/Year of study in the footnote of the first page.
4. Introduction/Context
5. Objectives
6. Description of the case, methodology, quantitative/qualitative aspects, critical analysis, comparison of the case study with other countries in the concerned area.
7. Special Features/Innovative Initiatives/Success Points
8. Conclusion – Implication and needed follow up, replicability,
9. Acknowledgments (if any)
10. Reference

c) *Research Papers in Open and Distance Learning (ODL)*

1. Abstract, Keywords (in about 100-150 words in a separate A4 size) paper
2. Title
3. Authors name, address in the foot-note of the first page.
4. Introduction (Context/Rationale, year of study, Institute/ University including country/countries)
5. Objectives of the Study
6. Sample Size, Sampling Technique
7. Study Tools
8. Methodology
9. Results (data processing, analytical presentation including statistical treatment, quantitative and qualitative analysis, tables, diagrams, graphs with captions).
10. Conclusion - major findings, implications, needed follow-up action, suggestion for further research in the area.
11. Acknowledgments (if necessary)
12. References in single space (Details about Format given separately).

References

A reference list should contain only references that are cited in the text. For maintaining a standard for writing references to a book, chapter in a book, article from a journal following style should be followed:

For books : Bobrow, D.G., & Collins, A.M. (Eds.), (1975). Representation and understanding: Studies in cognitive science, New York: Academic Press.

For articles : Frase, I.T. (1968). Questions as aids to reading: Some research and a theory. American Educational Research Journal, 5, 319-322.

If the reference is a policy document of any Government/International Document, it should be written as follows:

Commonwealth Secretariat (2000) Education in a Global Era: Challenges to Equity, Opportunities for Diversity-Issue Paper, London. Fourteenth Conference of Commonwealth Education Ministers, Halifax, Nova Scotia, Canada, November 2000.

Title of Books/Journals should not be abbreviated and it should be in italics.

Length of the Research Paper/Articles etc.

Research Paper	: 3500-7000 words,	Article	: 3500-7000 words,
Book Review	: About 2000 words,	Research Review	: About 2000 words

Kindly send Articles/Reports in A-4 size bond paper with appropriate margin along with a floppy (in MS-Word or Page Maker format) or through E-mail comosa@nios.ac.in

Editorial Correspondence

All communications related to publications should be addressed to:

The Editor, **COMOSA Journal of Open Schooling, National Institute of Open Schooling, A-24/25, Institutional Area, Sector-62, NOIDA-201309, Uttar Pradesh (India)**

COMOSA JOURNAL OF OPEN SCHOOLING

VOLUME : II

NUMBER : 2

JULY-DEC. 2011

CONTENTS

EDITORIAL

- Tagore's Distance Education Model: Implemented at the Lok-Siksha Samsad in 'Shantiniketan' or 'abode of peace' 1
Md. Mizanoor Rahman and Santosh Panda
- Using ODL to Strengthen the Technological-Pedagogical-Content-Knowledge of the Indian School Teacher for Integrating Vocational Education through Blended Learning Environments in School Education. 9
Pranita Gopal
- Initiating the Indian School Teachers into the OER Movement: A Need Analysis 21
Bharti Dogra
- Role of Open and Distance Learning System in Reducing Stress among the Learners 32
Bal Krishna Rai and Oum Prakash Sharma
- Exploring involvement of Civil Society Organization in Open Schooling in India: A Partnership Perspective for Achieving Gender Equality in Secondary Education 39
Sukanta Kumar Mahapatra