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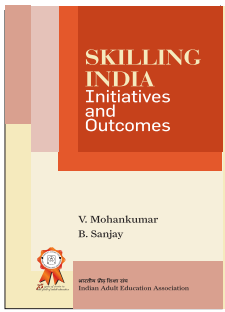
Indian Journal of Adult Education, 1939

Indian Journal of Adult Education, first published as a monthly in 1939, is now brought out as a quarterly by the Indian Adult Education Association. The journal has special interest in the theory and practice of Non-formal Education with special reference to the relationship between Adult Education, Development and current experiments in the field. Contributions on a wide range of themes within this broad framework are welcome.

The average length of a manuscript should normally be between 1500 and 2500 words; in exceptional cases, longer articles can also be accepted. Mimeographed, zeroxed or carbon copies of manuscripts will not be accepted. Manuscript should be typed in double space, on one side, with a 2" margin on A4 size paper. Footnotes and references should come at the end and not on every page. Authors are requested to submit one soft copy along with the CD (MS Word). Articles can be sent by E-mail at iaeadelhi@gmail.com

Books for Sale

Indian Adult Education Association has published two books - ***Adult and Lifelong Learning: Selected Articles*** (Edited by Dr.V.Mohankumar) and ***Skilling India: Initiatives and Outcomes*** *(A*uthored byV.Mohankumar and B.Sanjay). Both the books are for sales and price is Rs.300/- per copy. The discount given is 20% and hence, each book costs Rs.240/- only.



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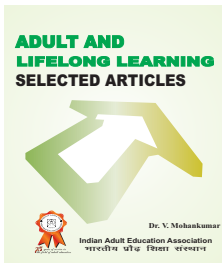

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Indian Adult Education Association, 1939

The Indian Adult Education Association founded in 1939, aims at improving the quality of life through education, which it visualizes as a continuous and lifelong process. It directs its efforts towards accelerating adult education as a process, a programme and a movement.

The Association co-ordinates activities of various agencies – governmental and voluntary, national and international – engaged in similar pursuits. It organizes conferences and seminars and undertakes surveys and research projects; it endeavors to update and sharpen the awareness of its members by bringing to them from all over the world expert views on and experiences in adult education. In pursuit of the policy, the Association has instituted the Nehru Literacy Award and Tagore Literacy Award for outstanding contribution to the promotion of Adult Education and Women's Literacy in the country respectively. It has also instituted Dr. Zakir Husain Memorial Lecture, which is delivered every year by an educationist of eminence.

The Association has brought out many publications on themes related to adult education, including Hindi editions of several UNESCO publications. It brings out the Indian Journal of Adult Education, Proudh Shiksha and IAEA Newsletter.

The Association acts as the Indian arm of the International Council for Adult Education, International Federation of Workers Education Association, International Reading Association and the Asian-South Pacific Association for Basic and Adult Education. Its membership is open to all individuals and institutions who believe in the aims and objectives of the Association.

It's headquarters is located in Shafiq Memorial at 17-B, Indraprastha Estate, New Delhi – 110 002.

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Editor's Note

With a strong base of youth population in India the realization of making use of their strength both for the economic development of our country and also actively participate in the economic development of other countries was felt long before. However, the single most important problem faced in achieving this aim was inadequate or no skill base of most of the youths without which they can either participate in the development process or a part of inclusive growth. Hence, government started giving importance to skill development and in this process the skill development training was strengthened by bringing National Skill Qualification Framework (NSQF) which was notified by the government headed by Dr. Manmohan Singh on December 27, 2013. After the General Election in 2014 the government headed by Shri Narendra Modi has given further fillip to skill training by creating a separate Ministry for Skill Development and Entrepreneurship (MSDE). In the beginning many had a big question before them how this Ministry will be able to function and how it will consolidate its position to make skill development training the most important one. In a short period of time the Ministry of Skill Development and Entrepreneurship has not only become a functional one but also consolidated by taking many far reaching decisions and actions.

One such action is the issue of recent order by the Cabinet Secretariat to transfer Training and Apprenticeship Training from the Ministry of Labour and Employment to Ministry of Skill Development and Entrepreneurship. With this all Industrial Training Institutes (ITIs) run under government sector, Industrial Training Centres (ITCs) functioning under private management and vocational training centres operating on Public-Private Partnership (PPP) basis across the country have come under the administrative control of MSDE. The total number of such institutions is around 12,000 with about 16 lakh seats. This order also made all the individuals covered under Apprenticeship Act to come to MSDE immediately. This is an important decision taken at an appropriate time as these institutions will now be reformed and reoriented with industry driven curricula, greater use of technology and

better industry connect. It is sure that this is the beginning and may be in course of time many such decisions and actions may follow with the result all vocational skill develompment training institutions may come under the ambit of MSDE.

Eventhough, may vocational training institutions, funded and non-funded, are functioning in this country, Jan Shikshan Sansthans are one of the most important voactional skill development training institutes with proven record of success. They are run under the aegis of NGOs and fully funded by the Ministry of Human Resource Development, department of School Education and Literacy. Right from 1967 these institutions have been patronized and funded by the governments formed by different political parties at the centre as they organize voactional training programmes on various skills and varying durations for out of school youths who are having rudimentary level of education. These sansthans have already proved their worth and merit in the field of vocational training and what they urgently need today is strenthening and expansion which they may be able to get if they are brought under MSDE. In this way the infrastructure developed, resources accumulated, experience gained and the expertise poded can be fully utilized for the benefit of training youths to impart skills.

Dr. V.Mohankumar

Professionalization of Adult Education in India: Challenges and Issues

S.Y.Shah

Introduction

The importance of professionalization of adult education has been increasingly recognized in different parts of the globe. The limited avenues of professionalization of adult education in several countries and its implications on the quality of adult learning and training has been highlighted by the UNESCO in the Belem Framework of Action and the national reports on the status of adult education in over 120 countries. (Unesco,2009). However, during the last decade, several European countries have made considerable progress in this area as evident from the increasing number of academic programmes, researches, publications, conferences and the ongoing activities of the ASEM *Network on Professionalization of Adult Education* (Regina & Nuissl,2010). Unlike Europe, most of the developing countries of Asia have been rather slow in addressing the issue of professionalization mainly because of "underdevelopment of adult education sector", (Singh, 2002), massive illiteracy, low income and lack of well defined policy towards adult education and institutional nfrastructure. (Panahon,2010;Ahmed,2009). But India with its massive adult education programme, variety of institutions and large number of adult educators involved in multifarious activities like teaching, training, research, counseling, planning and management of programmes has been striving to professionalize adult education with a view to improving its effectiveness.

Since several research and evaluation studies have traced the ineffectiveness of adult education programme to the poor quality of training of adult educators and their lack of professionalism, there has been an increasing concern towards professionalization. (National Literacy Mission, 2008 & 2009; Shah, 2010 a;) In fact, the need for developing a specialized academic and administrative cadre of professional adult educators as an

A revised version of the paper presented at the International Conference of the European Society for Research on the Education of Adults & ASEM, held at BONN, Germany, November 2, 2013.

"indispensable prerequisite" for the success of adult education programme has been reiterated by several policy documents specially the Twelfth Five Year Plan (2012-2017) and the "Strategy paper on capacity building" (Government of India, 2011; National Literacy Mission, 2012;UGC, 1986). While the state policy and funds did support the establishment of research and training institutions, university departments of adult education and development of accredited courses at certificate, diploma and degree levels; the progress towards professionalization has been rather limited due to various factors specially the lack of consistent policy towards institutionalization of adult education and closure of the National Institute of Adult Education set up with the primary purpose of initiating a series of professional development programmes for adult educators. (Mishra,2012). Besides, the performance of several university departments of adult education has been reported to be weak presumably because of the appointment of teachers lacking appropriate qualifications and competence especially during the early phase of development of university adult education. During the period 1992-2012, while the number of university departments of adult education in India declined from 93 to 51, the average enrolment of students in diploma and masters programme in adult education in most of the universities dwindled from 20-25 to 8-10. It is rather surprising that students are not attracted to adult education courses in spite of revamping the programmes of the National Literacy Mission which paved the way for massive increase in the number of positions at various levels. The estimated requirement of various positions were viz; 3, 40,000 facilitators at adult education centers; 10,690 programme coordinators at district level and 1040 directors and programme officers at 285 Institute of People's Education (National Literacy Mission,2010;Shah,2010 b). Why are the students not interested in adult education courses in spite of increasing number of job opportunities? Are the courses not relevant to the requirements of the labour market? What is the role of the state and professional associations in professionalization of adult education? Based on the study of policy documents, research reports and discussions with stakeholders, this paper attempts to identify some of the challenges of professionalization. Although, professionalization has several dimensions viz; development of institutions like training schools, university departments, professional associations, a body of theoretical knowledge, a code of ethics and regulatory mechanisms; this paper focuses only on three aspects: policy towards institutionalization-specially the setting up of university departments of adult education, relevance of courses vis a vis needs of labour market and status and role of professional associations. Arguing that professionalization of adult education in India has

been retarded due to the indiscriminate policy of expansion of university adult education without paying much attention to the quality of teachers, relevance of courses and requirements of the labor market, this paper highlights the importance of systematic planning and the need for working out operational strategies in consultation with the stakeholders.

Policy towards Institutionalization: Role of University Departments of Adult Education in Professionalization

Establishment of university departments of adult education and development of accredited courses at certificate, diploma and degree levels in adult education can play a key role in professionalization. However, if due attention is not paid to the quality of courses and competence of teachers and requirements of labor market, then they may not further the cause of professionalization as observed in the case of the development of university adult education in India. The 1980's witnessed tremendous expansion of university adult education in India mainly because of the policy and funding support from the University Grants Commission (UGC) - the apex statutory body of higher education in the country. Following the *Policy Framework of Higher Education (1977)* which recognized "extension as the third dimension of higher education"(UGC, 1978), the UGC encouraged the universities to institutionalize extension by setting up departments of adult, continuing education and extension. The then Chairperson of the UGC, Dr. Madhuri Shah, was not only committed to adult education but also showed great interest by writing to the Vice Chancellors to set up department of adult education in their respective universities for which the UGC offered an attractive package consisting of five academic and two administrative positions and liberal funds for the purchase of books and equipments. The UGC communication issued in 1984 stressed the importance of developing the discipline of adult education in universities and initiating teaching, research and extension so as to meet the increasing requirements of the professional manpower in the field of adult education, expanding the knowledge base and serving the needs of the local community. (UGC, 1984; Shah, 1996). The decision of the UGC to set up university departments of adult education was in the right direction since several evaluation and research studies had traced the ineffectiveness of adult education programe in the country to the poor quality of training of adult educators and lack of professional courses. Of the 150 universities in India in 1988, as many as 93 universities responded and set-up departments of adult education (Shah.1999).Since only two universities in India – Sri Venkateswara University and University of Madras

- were offering master's and doctoral programmes since the late 1970s, there were only a handful of professionally qualified persons in the country. Due to the acute shortage of doctorates in adult education which was the requisite qualification for the job of an assistant professor in a university, many universities appointed persons from other disciplines who did not possess the domain knowledge. In fact there were two categories of persons who joined the departments of adult education in the early days. The first category came from the governmental and non governmental organizations who had administrative and or field experience but lacked appropriate educational qualifications, research experience and publications. The second category was from the university departments of humanities, social science and sciences who had limited promotional avenues in their parent disciplines. It has been reported that "some sympathetic Vice Chancellors accommodated" them in the departments of adult education (Shah, 1999). The few qualified adult educators in the departments of adult education were either too junior to take up leadership role or they lacked leadership qualities (?). In this situation where 75 % of senior positions in the departments of adult education were occupied by less qualified persons, it was not possible to expect high level of professional competence and commitment from them. While the UGC could legitimately take the credit for the tremendous expansion of university adult education in India and providing employment to nearly 300 academic and 100 supporting staff- it cannot absolve itself of the problems that were generated. Perhaps nowhere else in the world, as many as 93 Departments of adult education were set up in universities within a short span of 3-5 years. The indiscriminate policy of the UGC of encouraging the Indian universities to set up adult education departments during 1980s and early 1990s when there were not enough qualified manpower in the country paved the way for "adhoc appointment of personnel with hardly any professional abilities and skills" which slowed down the pace and efficiency of the programme. (UGC,1986).Such non specialists and disinterested staff who due to their lack of knowledge and expertise failed to nurture university adult education, design appropriate courses and provide the professional leadership.

A study of the growth and development of university adult education in India revealed that university adult education programmes were initiated in "great hurry" without much consultation with the academic community and potential employers. (Shah, 2005). There was no systematic effort to ascertain the competences required by the university teachers or formulate a national curriculum framework for a master's programme in adult education

as was done in Europe (Regina & Susanne, 2007). In fact, large section of university teachers did not consider adult education as a discipline of study and argued that the knowledge base of adult education was inadequate and at best, the role of university adult education could be confined to extension activities or offering short term continuing education courses. Prevalence of such a perception among academic community was not very conducive to the development of university adult education in India. In such a scenario, why did the UGC initiate the policy of promoting university adult education on a large scale? During an interview, the former Chairperson of the UGC – Dr. Madhuri Shah who championed the cause of university adult education stated that had she not personally encouraged the universities (she wrote personal letters to the Vice Chancellors), then perhaps only few would have introduced adult education programmes. To quote her:

"I am a strong supporter of adult education. As the Chairperson of UGC, if I succeed in sowing the seeds of adult education in Indian universities and be fortunate in witnessing their germination and growth, then I would be delighted. I am afraid that if I fail to push adult education during my tenure and if my successors do not show the same interest, then the progress of adult education will be slow. I am not bothered how the plant for university adult education grows; it depends on the soil of universities, the extent of irrigation and how the saplings are tended. This is clearly the role of universities and UGC can only be sympathetic observer". (Shah,1998).

The former UGC chairperson did succeed in sowing the seeds of adult education in Indian universities since many universities set up departments of adult education.

One of the reasons the university adult educators in India could not succeed in providing professional leadership and getting respectability and recognition within the university system may be traced to their lack of competence and scholarship in the subject. In the absence of domain knowledge and competence in designing courses, majority of them confined to extension activities and had difficulty in getting recognized as academics by their peers. Since most of them were not involved in teaching and research, they remained as non teaching staff having the designations as directors, assistant directors and project officers in spite of the recommendation of the UGC to re designate them as teachers. Many universities found it difficult to re designate them as professors, associate professors and assistant professors since they did not possess the same

qualifications required by the teachers. By 2012, although the number of universities in India increased to 667, there was a sharp decline in the number of university departments of adult education which came down to 51. (UGC Report, 2012). The decline was due to various factors like retirement or resignation or redeployment of the staff or merger or closure of departments. According to a survey, as on March 2012, there were twenty one universities in India which offer, certificate, diploma and master's programme in adult education viz; University of Madras, Sri Venkateswara University, Bharatidasan University, Gandhigram Rural Institute – Deemed University, Andhra University, Barkatullah University , Dr. Hari Singh Gaur University, Jiwaji Univeristy, Hemwati Nandan Bahuguna Garhwal University, University of Delhi, Jamia Millia Islamia, Jawaharlal Nehru University, SNDT Women's University, Awadhesh Pratap Singh University, Dayalbagh Educational Institute - Deemed University, Shivaji University, Manipur University, North-Eastern Hill University and open universities like Indira Gandhi National Open University, Global Open University and Dr. B.R. Ambedkar Open University. About thirty universities offer short term continuing education courses and or extension programmes. Most of the universities which offer teaching programmes have provisions to offer short term continuing education programmes and extension activities.

The UGC policy of promoting adult education through the universities as a part of professionalization of adult education, though a well conceived, could not make much impact as the idea was premature and implemented expeditiously without much preparation and consultations with the stakeholders. The fast pace of expansion of university adult education in India did not provide much scope for wider consultations and academic discussions and it remained as a UGC funded project without becoming an integral part of the university system. However, the two universities which had started master's programme before the UGC policy, had in fact had wider consultations with different stakeholders and designed the courses in collaboration with the renowned adult education departments of the U.K. and Canada.

There was no systematic study of the required competences of university adult educators and preparation of a national curriculum framework. It seems that most of the universities were allured by the liberal funds given by the UGC and hoped that they could initiate adult education programme with non-specialists. Perhaps they subscribed to the view that adult education is not a special field requiring university education and training. While the non

specialists could manage extension activities as per UGC guidelines and coordinate the continuing education courses, most of them had neither expertise nor interest in developing teaching programmes. Although UGC did make an effort to design a curriculum for the Post –Masters Diploma programme, it was taken up by a few universities. In fact hardly any effort was made to develop adult education as a discipline of study.

Irrespective of the nature of job, all the university adult educators have well defined avenues for their professional growth through the refresher courses offered by Academic Staff Colleges and other professional organizations like the Indian Adult education Association and their pay scale and service conditions are regulated and remain at par with other disciplines. The UGC conducts National Eligibility Test (NET) which is a mandatory requirement for the appointment of Assistant Professors in universities. The Government does not have direct involvement in the recruitment process which is left to the universities. Though a cohesive group, most of the adult educators from universities has not shown much interest in research, publications or taking active part in the activities of professional associations and hence has a limited role in professionalization of adult education. How to strengthen university adult education to enable it play an effective role in professionalization of adult education?

The decline in enrolment of students in adult education programme seems to be linked to the lack of job opportunities. In spite of the continuation and expansion of adult education programme in the country and creation of positions at various levels in the field, it is very surprising that a large section of the adult education graduates either remain unemployed or underemployed. It has been observed that some of the nongovernmental organizations prefer social science graduates and M.B.A's to work as adult educators. With a view to understand the reasons for the preference of non adult education graduates for the positions of the directors/programme officers in adult education institutions like *the Jan Shikshan Sansthans* (Institute of Peoples Education), a focus group discussion was held with a group of administrators from government departments and civil society organizations. Most of them opined that adult education graduates were found to be weak in domain knowledge and lacked professional competence and in general were of "poor quality and slow learners" compared to other social science graduates or M.B.A's. (Shah, 2005). What are the reasons for such a perception of adult education graduates by the employers? A pilot study conducted with a sample of 60 students of three batches of post

graduates in adult education (2005-2008) revealed that compared to 10% of students who opted for adult education as their first choice because of interest in the subject, the rest (90%) took it up as the only course available to enroll in the university. As many as 80% of the students said that although they had applied for two other courses in the university viz; social work and teacher training, they did not succeed and hence adult education was the only option available to them. Being the left outs from other disciplines, it was quite probable that they were of poor quality? Since most of the universities followed the curriculum framed during 1980s and 1990s without any revision or up gradation during the next decade, it may not be equipping the students with the knowledge about recent developments in the field and competences required by the industry. An interaction with some of the employers of adult education graduates in Delhi revealed that 75 % were not happy with their performance and felt that they were not at all qualitatively better than the non adult education graduates. They observed that imparting on the job training to non adult education graduates who have excellent academic credentials was much easier as they were more receptive to the training and their performance was also much better than the adult education graduates (Shah,2005).How to attract bright students who are genuinely interested in adult education?

Some of the departments of adult education of Indian universities tried to attract the students by offering new courses in human resource management, rural development, community education, non formal education, development education or incorporating the elements from the discipline of management or social work and offering a programme on management of continuing education. However 75% of the university departments of adult education in India continue to offer master's programme in adult education. Only recently, the University of Delhi has developed a master's programme in lifelong learning and started offering it from July 2014.

Although there are twenty one universities in India which offer a number of certificate, diploma, masters and doctoral programmes in adult education on a full time basis, the large numbers who are not in a position to join the full time programme have no avenues for acquiring professional qualifications. Following an international seminar on *Professionalization of Adult Education* organized jointly by the International Institute of Literacy of University of Pennsylvania (USA) and the National Literacy Mission in New Delhi in 1997, initiatives were taken by Jawaharlal Nehru University (JNU) to

professionalize adult education by developing a certificate programme through distance mode in collaboration with the then UNESCO Institute For Education. A curriculum framework was designed in an international workshop and in consultation with all the stakeholders and a self learning package comprising of 32 units was prepared by a group of 17 adult educators and it was hosted on the UNESCO website in 2007 as an open courseware so that interested adult educators could access them freely to enhance their professional competence. (www.unesco.org/education/aladin/paldin.). However, during the first two years only a handful of adult educators accessed the course. An attempt was made to interview some of those who accessed the materials and it became clear that without the provision of a recognized certificate, there will not be many takers for the course. Since JNU had no mandate to provide university certificate for distance learners, an attempt was made to approach the Indira Gandhi National Open University (IGNOU) to offer the course. After reviewing the learning package, IGNOU adapted the package and expanded it to develop as a post graduate diploma programme- *Participatory Adult learning Documentation and Information and Networking (PALDIN)*

The Post Graduate Diploma programme *on Participatory Adult Learning Documentation and Information Networking*, consists of five courses - 4 theory courses, each of 6 credits, and one, practical course of 10 credits. The following are the courses:

Course No: MAE-001:
Understanding Adult Education
Course No: MAE-002:
Policy Planning and Implementation of Adult Education in India.
Course No: MAE-003:
Knowledge Management & Information Dissemination & Networking.
Course No: MES-016:
Educational Research
Course No: MAEL-001*:*
Practical Work.

At the end of the course, the candidates are expected to take a written examination of three hours in each of the four theory papers, besides submitting a report on field placement.

In a follow-up study conducted during the first two years, (2009-11), it was noted that the course did not succeed in attracting large number of students, perhaps because of the limited publicity of the course. (Reddy, 2012). Besides, those who enrolled for the course felt that the high fee charged by the university was a great deterrent. The lack of recognition of the course by the National Literacy Mission of Government of India which is the largest employer of adult educators also did not motivate the facilitators to enroll for the course. Although Ms. Vandana Jena, the then Director General of NLM welcomed the idea, her successors did not evince much interest and lend support to the course in terms of recognition. This implied that the development of professional course, though an important step in the process towards professionalization needs to be followed up with several other initiatives. The paying capacity of the potential candidate is an important factor in the success of the programme. The problem may be solved by persuading the university to reduce the fees and simultaneously appealing to the Director General of National Literacy Mission to grant recognition to the Diploma as an essential requirement for the position of Programme Officers of adult education programme and Jan Shikshan Sansthans. The state could also make a provision for reimbursing the fee of the programme for those employees already working in government supported organizations. Such an incentive may motivate the adult educators to upgrade their professional qualification. Efforts made by the professional associations like the Indian Adult Education did not succeed in persuading the government to accord recognition for the course. Apart from designing a quality programme, it should be ensured that only genuinely interested students are recruited for the programme. This can be done through administering an aptitude test to the potential candidates. This may reduce the number of drop outs who often join a course without any serious thinking or genuine interest in the subject.

Issues with the State

Notwithstanding the availability of recognized professional courses in adult education offered by several universities in India, there are not many takers. It is primarily due to the non recognition of courses by the government and the unattractive remuneration. The preference of non professionals not only demoralizes the professionally qualified adult educators but also discourages the potential candidates from taking up adult education courses. The repeated efforts made by professional associations like the Indian Adult Education Association to accord due recognition to the professionally

qualified persons for the position of adult educators, the State seems to be hesitant, perhaps due to the apprehension that the appointment of professionally qualified personnel may give rise to the demand for better pay and perks like the professionally qualified school teachers. The number of grassroots level adult educators being very large in India; the government may also be concerned with the financial implications at a time when the budget for adult education is being drastically reduced. Another reason for the lack of interest in professional courses offered by the Open University is because of the high fees which most of the adult educators find it difficult to bear since the fee is equal to their honorarium of 2.5 months. If there would have been some incentive to adult educators in terms of higher pay or promotion, then perhaps some of them might have also enrolled for the professional courses in adult education. State being the largest employer in adult education, its employment policies seems to have a detrimental effect on professionalization. The development of professional courses and certifications being an important step in the professionalization of adult education needs to be followed up with well-defined recruitment policies, code of conduct and service conditions of adult educators.

There is a need to set up regulatory bodies to lay down the guidelines and norms towards basic qualifications and employment conditions of the staff of adult education programme. The Government of India is moving very slowly in this direction. In the absence of such bodies, those who acquire professional qualifications find it difficult to get proper employment and other service benefits. The *Jan Shikshan Sansthans* (Institutes of Peoples Education) and *Zilla Sakharta Samitis* (District Literacy Committees) are the potential employers of adult education graduates in India. However, it is observed that for the recruitment of the position of Director of Institute of Peoples Education often M.B.A's are preferred to Masters in Adult Education. The District Literacy Committees which have a number of positions of adult educators and coordinators in their district are also not keen to recruit adult education graduates. Although an effort was made to persuade the administrators to recruit adult education graduates, they did not respond since they felt that the existing adult education programmes offered by the universities are of very poor quality and do not impart the knowledge and skills needed to manage an adult education institution. (Chatterjee, 2006). Professionalization of adult educators needs to be taken up in a comprehensive manner and in consultation with potential employers and the state.

In India, the village education committee is vested with the power to appoint adult education facilitators employed at the Lok *Shiksha Kendras* (Adult Education Centers). Since these committees are often dominated by local politicians, merit is not strictly adhered to resulting in the recruitment of poor quality personnel and often vested interests or political consideration influence the selection process. Besides, unusual delay in the release of grants by the government to district and village education committees lead to high drop outs among the adult educators. Because of low remuneration and absence of well defined service conditions and promotional avenues, the profession of adult education remains unattractive for the talented. Those who continue in the job have no incentive to enhance their competence. Hence striving towards professionalization of adult educators becomes very challenging. How to sustain the interest of adult educators in the profession and motivate them to upgrade their competence has been one of the major concerns.

Role of Professional Associations

It is well known that most of the established professions are characterized by strong professional associations. Such associations can play a key role in furthering professionalization. India has several adult education associations which have been undertaking a number of professional development activities. The prominent among them are Indian Adult Education Association (IAEA), Indian University Association of Continuing Education, and Community Education. IAEA, the oldest Professional association, was established in 1939 by a group of enlightened individuals who felt the need for an exclusive organization to "create public opinion on the need for a public policy on adult education" and promote the cause of adult education and serve as a clearing house for exchange of ideas, information and advice concerning adult education in the different states of India. (*Indian adult education association*, 1952). Since some of the founding and early members were eminent educationists, Vice Chancellors, senior civil servants and diplomats, they wielded considerable influence among policy makers which helped shaping adult education policies in the country. In fact, the first Prime Minister of the country Pandit Jawaharlal Nehru took great interest in adult education and attended the IAEA function when the foundation stone was laid by a neo literate. Dr. Zakir Husain, a former Vice President of India was a prominent member of IAEA who took keen interest in the activities of the Association. Apart from organizing annual conferences, regional workshops, national and international seminars, IAEA has been

providing an opportunity to its members to improve their knowledge and skills through short courses on research methodology, recent developments in the field of adult education besides organizing training programmes, undertaking research studies and evaluations and bringing out publications and a journal – *Indian Journal of Adult Education*- since 1939. (www.iaea-india.org.). Some of the members of IAEA have been serving as members of different committees set up by the Government of India and contribute to the development of adult education policy and programmes. With a view to furthering the professionalization of adult education and undertaking collaborative programmes with international organizations, IAEA set up an International Institute of Adult and Lifelong Education in 2002. (www.iiale.org.) It provides a forum for the members to interact with overseas adult educators and listen to their presentations and undertake collaborative programmes and projects with international organizations. While the first three decades of IAEA attracted high profile members, specially ministers, senior civil servants, diplomats, Vice Chancellors, later years the membership was mainly from academics, activists and administrators. Over the years the life membership of IAEA increased from 60 in 1964 to 815 in 1989 to 1015 in 2012. However the institutional membership though increased from 79 in 1964 to 225 in 1989 declined to 182 by 2012. (Saxena, 2000). More than half of members being retired, do not take much interest in professional activities. The average attendance in the annual conference is around 200-300 and most of them are employed in academic institutions and non governmental organizations. Participation in the professional activities of IAEA and remitting membership fee has been a problem for the members due to financial constraints. The professional organizations often do not get funding support from the government. The earlier practice of providing financial support to IAEA to organize annual conference has been discontinued by the Ministry of Education. Raising resources to organize regular professional development programmes continues to be challenging. There is a need to infuse new vitality and vigor into the IAEA so that it could play a proactive role in furthering the professionalization of adult education in the country. The challenge is how to attract good talents into the field of adult education and promote it as a sought after profession that needs to be addressed by the professional associations.

References

Ahmed, M. (2009): *The State and Development of Adult Learning and Education in Asia and the Pacific*: Regional Synthesis Report. Hamburg: UNESCO Institute for Lifelong Learning.

http://www.unesco.org/fileadmin/MULTIMEDIA/INSTITUTES/UIL/confintea/pdf/GRALE/confinteavi_grale_asia_synthesis_en.pdf. Accessed on September 12, 2013.

Government of India, Ministry of Human Resource Development (2011). *Working Group Report on Elementary Education and Literacy-12th Five Year Plan (2012-2017).* p.304.

Indian Adult Education Association, (1952). *What it is and what it does*? Pp.3-6.; see also: www.iaea-india.org.

Chatterjee, B. Personal communication with the author. May 21, 2005.

Interview with (late) Dr. Madhuri R Shah. 12 Aug. 1985 cited in Shah, S.Y. (1998). "UGC and University Adult Education: An Approach to Ninth Plan", *Society, Education and Development,* New Delhi: Association of Indian Universities. p.78.

Mishra, L. (2012) "Remembering shri Anil Bordia", *Indian Journal of adult education. vol.73. No 3.*

National Literacy Mission, (2008). *Analysis of External Evaluation Reports of Total Literacy Campaigns,* New Delhi. Volume 5.

National Literacy Mission (2009), *Evaluation of Schemes of Total Literacy campaigns, Operation Restoration and Post Literacy Programme of National literacy Mission,* New Delhi.

National Literacy Mission (2010), *Report of the Task Force on Training,* New Delhi. (Unpublished).

National Literacy Mission (2012). *Strategy paper on capacity building under* Saakshar *bharath* programme. (Unpublished).

National Literacy Mission (2012*). Saaksharbharath*, see also: www.saaksharbhatath.nic.in

New Guidelines on Adult and Continuing Education and Extension Programmes in Universities and Colleges, (1988). New Delhi: University Grants Commission. p.5.

Panahon, a (2010). "Adult Education in lifelong learning and the need to professionalize the ranks of stakeholders: the Asian perspective" in Regina Egetenmeyer and Ekkehard Nuissl. eds. *Teachers and Trainers in Adult and Lifelong Learning.* Frankfurt am Main: Peterlang.

Regina Egetenmeyer and Ekkehard Nuissl. eds. (2010). *Teachers and Trainers in Adult* and Lifelong Learning. Frankfurt am Main: Peterlang.

Regina Egetenmeyer, Susanne Lattke (2007): The EMAE-Project - Developing and implementing a multinational Master's Programme in Adult Education in http://www.die-bonn.de/doks/egetenmeyer0701.pdf. Accessed on October 7, 2013.

Reddy, L. Telephonic communication with the author, August, 24, 2012.

Saxena, J.C. (2000). "Fifty Years of Indian Adult Education Association" in Daswani C.J. & Shah, S.Y, ed. *Adult Education in India*: Selected papers. Unesco: New Delhi. p.36.

Singh, M.ed. (2002). *Institutionalizing Lifelong Education*, UNESCO Institute for Education Hamburg. p.10

Shah, S.Y. (1996) "UGC and university adult education: An approach to ninth plan". *University News*. Vol. xxxiv. no.44, p.6.

Shah, S.Y. (1998) "UGC and university adult education". In *Society, Education and Development.* Association of Indian universities: New Delhi. p.78

Shah, S.Y. (1999). "The policy, philosophy and problems of university adult education in India". In S.Y. Shah.ed. *Studies in Indian adult education*. Indian Adult Education Association: New Delhi pp.64-65

Shah, S.Y. *(2005)). "Growth and Development of University Adult Education in India". A research project funded by the University Grants Commission. (Unpublished).*

Shah, S. Y. (2006). "Professionalization of Indian adult education." In P. Adinarayana Reddy & Uma Devi .ed. *Current Trends in Adult Education*. New Delhi: Sarup & Sons.

Shah, S.Y. (2010 a). "Mapping the field of training in adult and lifelong learning in India" in Regina Egetenmeyer and Ekkehard Nuissl .eds. *Teachers and Trainers in Adult and Lifelong Learning* Frankfurt am Main: Peterlang.

Shah, S.Y. (2010 b). "Capacity building programme for adult education functionaries" in *Newsletter*, National Literacy Mission: New Delhi. September.

University Grants Commission (1978), *Development of higher education in India: A policy frame*: New Delhi. P.3 and pp. 12-13.

University Grants Commission (1984). *Guidelines on adult continuing education & UGC chairpersons letter to Vice Chancellors 13November, 1984 in file 1-22/84. UGC.* (Unpublished)

University Grants Commission, (1986). University system and extension as the third dimension: Report of the review committee: New Delhi: pp-71.

Professional Development and Capacity Building in Adult Education through Open and Distance Learning Mode by IGNOU: Experiences, Problems and Prospects

M. V. Lakshmi Reddy

Introduction

'Adult education' is, in fact, a specialized area of 'education', a discipline by itself and a field of activity. While the Departments of Education in conventional Universities or Colleges of Education in India and across the globe primarily cater to professional development and capacity building of teachers in school system, they have abdicated their responsibility towards education of non-teacher-adults — non-literates, literates and educationally qualified persons inside and outside the formal systems. Added to this, professional development and capacity building in 'adult education' through so called Departments / Centres of Adult, Continuing Education and Extension (ACEE) and some recently renamed Departments of Lifelong Learning and Extension (LLE) of conventional universities in India has, unfortunately, been an unsuccessful story since 1970s, when massive nation-wide efforts began in this regard.

Talking about adult education in Indian Universities, Shah (1997, pp.77-88) presents an elaborate account of series of failures and disappointing notes of experiences spread over twenty years of Adult Education Unit of Jawaharlal Nehru University. He attributes these failures to the triad of predominant organizational character of the University, the background of the students and the shifting nature of changes in the characteristic leadership of the University. Net result is that, this Unit could not start or run any independent academic programme leading to diploma, master's or research degree in the discipline of 'adult education'. This presents one extreme. The well-known unwritten story of Department of ACEE of University of Madras which started on-campus programme of Master of Arts in Andragogy in 1970s is that it has been struggling to survive by somehow attracting and retaining a couple of students for its Master's and research degree programmes. It is, in fact, a mixture of many different failures and successes of its own kind. On the other extreme is the Department of ACEE

of Sri Venkateswara University. As Reddy (2006) presents, it started regular on-campus course of Post-Graduate Diploma in Adult Education in 1973 with annual intake of 30 students, discontinued it later to start 'Master of Arts in Adult Education' course in 1978-79 with an intake of 20 students per year. It produced 233 Dissertations/Project Reports, 16 M.Phils and 27 Ph.Ds spread over 17 years from 1978-2005. It is, thus, a pioneer and a success story of its kind in the country till recently. However, as the author is currently aware, this Department too had put its 'Master of Arts in Adult Education' in hold for a couple of years for various reasons (sic) and later revived it, which now (as it stands in 2014) has only a couple of students enrolled in its Master of Arts in Adult Education for the latest academic session. The untold story of the Centre of ACCE of University of Kerala is that they could start Post-Master's Diploma in Adult Education and produce about 150 PMDAE graduates spread over about ten years, but discontinued it about two decades ago, with its faculty dwindled to a couple of members (sic). Similarly, once active Department of ACEE of Osmania University also has to contend with no takers for its 'adult education' courses. Though published accounts are not available in respect of the Departments of ACEE / LLE of Manipur University, North-Eastern Hill University and University of Delhi, among others, which are currently active running academic programmes of MA in Adult Education/Adult and Continuing Education/Lifelong Learning/Lifelong Education, and also research degree programmes, their collective intake of students per annum at national level could be expected to be slightly more than a hundred students. Thus, it is an established fact that these Departments/Centres/Units of ACEE / LLE established in different conventional Universities in India, over the time, have failed to adequately address, in sustained manner, the needs of professional development and capacity building in adult education at national level. In addition, as Lakshmi Reddy (2013, p.65) points out, there is no uniformity in syllabi/curricula of courses/programmes of these Departments/Centres. Given the situation, it is needless to say that there is no national level regulatory body to promote professional development of 'adult education' in India.

Nevertheless, the reasons for failure of 'adult education' could be different in different parts of the world and vary widely. But, the major one that prevails in India even today, as the author opines, is like what was said by Coolie Verner (1978) in the context elsewhere: "Adult education is a relatively new discipline that is appearing with greater frequency in university curricula ... Too many of the newer university programs are in the hands of individuals not experts in the discipline with the result that graduates are released to

the field deficient in knowledge and without a clear perception of the unique characteristics of the profession they have entered ... In part, the cause of this perversion of the discipline can be found in the too rapid proliferation of programs and in the inability of the older established universities to supply the academic cadre required to staff new programs; but for the most part it is due to the failure of deans and faculties of education to recognize and accept adult education as an academic discipline with its own distinctive body of knowledge related to but different from the normal concerns of a school of education". Similarly, even in India the prevailing situation testifies the need for strengthening professional development and capacity building in adult education at different levels.

Adult education as a discipline has thus become open for entry of all kinds of career-hunters from diverse disciplines at different levels who suffer from professional psychosis that entry of professionally qualified or suitably trained persons into their rightful place will be a major challenge/threat to their image, performance, professional growth and survival. Eventually, expected outcome is, internal professional squabbles and quibbles that undermine the nature, quality and potential of the very discipline of 'adult education'. In nutshell, adult education has, thus, become every one's baby, and obviously, of no one's.

IGNOU's Initiatives for Professional Development and Capacity Building in 'Adult Education' through Open and Distance Learning Mode

As far as 'adult education' discipline is concerned, IGNOU presents a different picture. It has accepted 'adult education' as one of the disciplines of School of Education (SOE), and has appointed professionally qualified person holding master's and doctoral degrees in 'adult education' (i.e. the author here) as a faculty member of that discipline. Unfortunately, due to the then prevalent academic culture characterized by blatant domination of mediocrity aimed at sabotaging the meritocracy and professionalism of the discipline, among other nasty reasons which will be out of context to mention here, the professionally qualified faculty member concerned could not (be allowed or facilitated to) develop the professional development propgrammes in 'adult education' for about four years during 2001-2005 in SOE. Nevertheless, finally, the development and launch of three programmes — Post-Graduate Diploma in Adult Education (PGDAE) in 2009, and

subsequently both Post-Graduate Certificate in Adult Education (PGCAE) as well as Master of Arts in Adult Education (MAAE) in 2011 simultaneously — through open and distance learning mode became a reality under School of Extension and Development Studies (SOEDS) of IGNOU itself, that too within a short period of four years during 2008-2011 . Thus, fortunately and as a boon in disguise, when proper opportunity was given to the concerned professionally qualified faculty member, he could develop and launch the above three programmes through SOEDS in the shortest possible period, the pace of which has even compensated the time lost by him in SOE. Subsequently, 'adult education' has also been introduced as a specialization area under Master of Arts in Education (MAEDU) programme which was already on offer through ODL mode under SOE. Further, the three programmes (i.e. PGDAE, PGCAE and MAAE) have also been transferred from SOEDS to SOE of IGNOU, to restore them to their rightful discipline, 'adult education' of SOE. This is how adult educationists have (or some times made) to perform 'somersaults' to push forward even their just professional mission with lot of hard work, and to show the sabotaging, non-professional, mediocre, cynical, non-performing academic thugs their place in the system.

Before discussing the practices followed, the experiences gone through along with the problems, and the prospects that await in respect of the above mentioned adult education programmes, a few words about IGNOU's practice in general. Since its inception in 1985, IGNOU has been promoting educational opportunities through ODL mode by collaborating with different types of formal and non-formal institutions at different levels – local, state, national, and international – and by judiciously exploiting information and communication technologies to reach the unreached and the disadvantaged. IGNOU designs and develops self-instructional/self-learning materials (SIMs/ SLMs) of its own in print medium, which is the major medium of instruction of its programmes. The supplementary media include, among other things, audio-video programmes, Radio programmes (Interactive Radio Counselling), TV broadcast (including DTH services), personal face-to-face tutoring and counselling sessions, contact programmes, live teleconference and occasionally web-conferencing. Each academic *Programme* is divided into a few *Courses*, each course into a few *Blocks* and each block into a few *Units,* which cover different themes. Each Programme and Course is weighted in terms of credits, and *each credit* is equated with 30 hours of study and other related activities to be performed by the students. While there is a Programme Coordinator for each programme, there are

Coordinators for the courses under each programme. However, Programme Coordinator could also be the coordinator of the courses under the programme. The programme and course coordinators together are responsible for planning, development and delivery or implementation of the academic programmes. Normally, face-to-face orientation programmes are organized by the course/programme coordinators for the chosen group of course writers who are basically the teachers/academics identified from different universities, colleges and other institutions all over the country, including faculty members of IGNOU. The units written by the course writers are subjected to format, content, language and copy editing before the SLMs/ SIMs are printed. However, successful delivery or implementation of the programmes essentially depends on the nature, magnitude and quality of student support structure established at the third tier which is in the form of Learner Support Centres called Study Cetnres or Programme Study Centres (SCs/PSCs) under the control of Regional Centres (RCs), which constitute the second tier of the system, with the first tier being the Headquarters. Assignments and Term-End Examinations (TEE) constitute the essential components (among other specific components, if any, of any programme as the case may be) of the continuous and comprehensive evaluation of the students.

Objectives of the Paper

While designing, developing and delivering or implementing PGDAE, PGCAE and MAAE programmes some innovative practices have been followed that provided different experiences and posed diverse problems. All these have given an excellent insight into the essential requirements for strengthening these programmes for promotion of long-term, comprehensive and sustainable professional development and capacity building in adult education in India. It is in the light of the above, the author as the coordinator of these programmes and the courses therein, attempts to:

i) present different innovative practices followed in development and delivery of PGDAE, PGCAE and MAAE programmes;
ii) share the experiences related to these programmes which provide panoramic picture of the problems that confront as well as mosaic of possible prospects that await these programmes;
iii) highlight the basic minimum support required to promote certain effective positive practices that can help in huge take off, rapid progression and successful implementation of these programmes

in India; and

iv) to set a model that could be emulated by other developing countries to promote 'adult education' with a view to demonstrate its strength to the world.

Development and Delivery/Implementation of PGDAE, PGCAE and MAAE programmes: Innovative Practices, Experiences, Problems, Requirements and Prospects

In view of the established need for promotion of professional development and capacity building in adult education at global level and more so in the developing countries, UNESCO, in collaboration and co-operation with various institutions involved in adult education in different countries, has been making some consistent efforts since the beginning of the 21st century. As a part of its established global network called Adult Learning, Documentation and Information Networking (ALADIN) a country network called ALADIN-India has come into existence in India. The collaborative efforts undertaken by UNESCO Institute of Lifelong Learning (UIL) in 2006 in co-operation and collaboration with ALADIN-India had resulted in development of preliminary draft material, called Participatory Adult Learning, Documentation and Information Networking (PALDIN), in the form of two draft courses together containing 31 draft units which were also put on the UNESCO website — http://www.unesco.org/education/aladin/paldin/ — for comments and criticism by the global academic community.

It is at this juncture, ALADIN-India sought involvement and cooperation of IGNOU to promote capacity building and professional development of adult education in India through open and distance learning mode. It (IGNOU), in collaboration with UIL and JNU, had organized a National Workshop from 11-14 December 2007 to review the said PALDIN draft material, amongst other things, and to consider feasibility of developing and launching academic programme(s) in adult education. The author who was put as a member on the organizing committee of this workshop had subsequently been assigned the task of coordinating, developing and launching suitable academic programmes. After considering the report of the said review workshop along with PALDIN draft units, the Programme Coordinator with the help of a Programme Design-cum-Expert Committee specially constituted for the purpose had identified and intermixed 17 new units/titles covering various complementary themes and reorganized them as a whole into a programme called Post-Graduate Diploma in Adult Education (PGDAE) consisting of

three theory courses and a practical course. In addition, one course from on-going MA in Education (MAEDU) programme of IGNOU has been adopted into PGDAE finally making it a 34 credits programme with four theory courses and a practical course having three different components. PGDAE was thus launched in July 2009. While it continues to be an independent programme, all the courses of PGDAE were together constituted into first year of Master of Arts in Adult Education (MAAE) programme, and second year courses were added to make it (MAAE) a two-year programme of 68 credits. Simultaneously, Post-Graduate Certificate in Adult Education (PGCAE) was carved out by taking out two theory courses of PGDAE and one component of its practical course. Accordingly, both MAAE and PGCAE were developed and simultaneously launched in July 2011. Brief details of these three programmes are given in Table -1.

Table – 1
Essential Details of PGDAE, PGCAE and MAAE programmes

Programme/Aspect		**PGDAE**	**PGCAE**	**MAAE**
Eligibility for admission		Any Graduate	Any Graduate	Any Graduate
Medium of instruction		English	English	English
Duration	Minimum	1 year	6 months	2 years
	Maximum	4 years	2 years	5 years
Launch Year and Session		July 2009	July 2011	July 2011
Frequency/sessions of offer		Once a year, i.e. in July session only	Twice a year, i.e. in January and July sessions	Once a year, i.e. in July session only
Total No. of Credits		34	15	68
No. of Courses (and Credits of each Course)	Theory	4 (6)	2 (6)	8 (6)
	Practical	1 (10)	1 (3)	1 (10)
	Dissertation	Nil	Nil	1 (10)

Note: Figures in parentheses are credits of each course.

The codes and the titles of the courses of PGDAE, PGCAE and MAAE programmes are given below:

PGDAE (Launched w.e.f. July 2009): Its courses include the following:

- MAE-001: Understanding Adult Education

- MAE-002: Policy Planning and Implementation of Adult Education in India
- MAE-003: Knowledge Management, Information Dissemination and Networking in Adult Education
- MES-016: Educational Research
- MAEL-001: Practical Work Components
  - ❖ Community-based Practical Activities
  - ❖ Workshop-based Practical Activities
  - ❖ Adult Education Training Centre / Institution-based Practical Activities

(**Note:** Course with code MES-016 above is taken from MAEDU programme).

PGCAE (Launched w.e.f. July 2011): Its courses include the following:

- MAE-001: Understanding Adult Education
- MAE-002: Policy Planning and Implementation of Adult Education in India
- MAEL-002: Practical Work: Community-based Practical Activities

MAAE (Launched w.e.f. July 2011): Its courses include the following:

First Year Courses: These include all the courses of PGDAE mentioned above (i.e. PGDAE forms first year of MAAE)

Second Year Courses: These include the following:

- MAE-004: Extension Education and Development
- MAE-005: Population and Development Education
- MAEE-001: Sustainable Development (Optional/Elective*)
- MESE-061: Open and Distance Learning Systems (Optional/Elective*)
- MAEE-002: Basics of Legal Awareness (Optional/Elective**)
- MESE-062: Vocational Education (Optional/Elective**)
- MAEP-001: Dissertation Work.

(**Notes:** * Indicates that only one of the given two courses should be opted.

** Also indicates that only one of the given two courses should be opted. The two optional courses with codes MESE-061 and MESE-062 are taken from MED programme.

Now, the discussion focuses on important practices, experiences, problems, requirements and prospects related to the above mentioned programmes.

A. Innovative practices

Some important innovative practices followed include:

i) Collaborative efforts of national and international institutions

There were collaborative efforts by IGNOU, JNU and UIL in designing and development of PGDAE material which were already highlighted elsewhere above.

ii) Extensive use of e-mail

E-mail has been used extensively in a manner unprecedented at IGNOU for the following activities:

- *Orientation and training of course-writers through E-mail:* Use of E-mail for conducting orientation and training of the chosen course writers is the major innovative practice followed by the programme coordinator of these programmes. *It helped in saving a few hundred thousands of Indian Rupees per theory course,* which is otherwise required in conducting a face-to-face orientation programme for the concerned course writers. Further, their training when they were actually involved in writing/developing the course units was also coordinated and monitored through E-mail to facilitate their timely contribution of the units.

- *Coordination of development of course material by single coordinator:* Coordination of development of entire course material for the said three programmes has been done by the programme coordinator alone (i.e. the author here). This became possible only because of extensive use of E-mail by him at all stages of development of course material with full devotion and commitment including spending of most of his private time at home during week-days, week-ends and holidays as well.

- *Coordination of Development of Cover Designs:* In normal practice, any graphic designer on the relevant panel of IGNOU is called by the concerned programme/course coordinator for personal discussion to explain the intended design to the graphic designer. Later, the designer brings the hard copies of the draft designs at different stages of cover design

development. But, the coordinator here used a combination of two distance modes, namely E-mail and telephone, in an effective manner to mutually facilitate the discussion between the graphic designer and the coordinator at different stages from beginning till completion of the cover designs for relevant courses, programme guides and handbooks.

iii) Soft copies put as OER material on IGNOU website

All soft copies (scanned versions) of the entire print material of these programmes were uploaded under 'E-Gyankosh' link of IGNOU's institutional website: www.ignou.ac.in, as Open Education Resource (OER) material, which was till recently available for access by any one, but not available now as a matter of on-going policy review. It is hoped that it may be restored soon.

iv) Inter-programme adaptation of courses

It has been done between courses of MAEDU and MAAE programmes. While one course of MAEDU was adopted as a course in PGDAE (which is also the first year of MAAE) programme, four courses of MAAE have been constituted as 'adult education' specialization area and introduced it under second year of MAEDU programme.

v) Inclusion of practical components

Practical course of PGDAE / MAAE contained three practical components to provide experience of community-based activities, workshop-based activities and adult education training centre/institution-based activities, while the practical course of PGCAE programme contained one practical component providing for experience of community-based activities only.

vi) Independent offer with flexibility

PGCAE, PGDAE and MAAE are offered as independent programmes with flexibility to enable students to seek credit transfer facility for the courses of the lower level programme completed by them, when they get admission into higher level programme.

vii) Cost-cutting initiative

As a cost-cutting initiative, only existing SCs/PSCs of BED, MED and MAEDU programmes of IGNOU have been provisionally allowed to be the SCs/PSCs for PGCAE, PGDAE and MAAE programmes as well. If there is reasonably good enrolment of students for these programmes under any RC, only then the Departments/Centres of ACEE / LLE in conventional Universities and/or

the State Resource Centres (SRCs) for Adult Education existing in different states of India are considered as second option for their establishment as PSCs specially for these programmes. Otherwise, this option is considered to be costlier and unviable by the university, though qualitatively it is more desirable, effective, progressive and sustainable in the long-term interests.

B. **Enrolment, Experiences and Problems**

The student enrolment, experiences and problems related to implementation of these programmes are presented in brief below.

Table – 2
Number of Students Enrolled for PGDAE, PGCAE and MAAE programmes

Programme		Enrolment of students (Year-wise)						Total
		2009	2010	2011	2012	2013	2014	
PGDAE (Offered in July session only)		6	12	7	3	0*	3	**31**
PGCAE (Offered in both January and July sessions)	January session	NA	NA	NA	4	2	7	**13**
	July session	NA	NA	0	3	7	5	**15**
MAAE (Offered in July session only)	Direct/fresh admission	NA	NA	1	4	13	11	**29**
	Lateral entry admission into second year	NA	NA	NA	7 @	3 @	0	**10 @**
Total		**6**	**12**	**8**	**21** (14+7@)	**25** (22+3@)	**26**	**88 + 10@**

Notes:

***** PGDAE has been made the first year of MAAE programme, launched in 2011. Since the entry qualification is same for both PGDAE and MAAE, the students who initially desired to enroll for PGDAE, after enquiring about relative advantage in duration, chose to join MAAE.

NA - Not Applicable, as PGCAE and MAAE were launched w.e.f. July 2011 only.
@ - These are PGDAE Graduates who are allowed admission into 2nd year of MAAE, as PGDAE courses together constituted 1st year of MAAE which was launched in July 2011.

i) Low enrolment

Low enrolment has been a problem with PGCAE, PGDAE and MAAE programmes (See Table 2). It is due to non-activation of existing PSCs of IGNOU and also non-establishment of the Departments of ACEE / LLE and/ or SRCs in different states of India as PSCs for these programmes under different RCs. However, from Table - 2, it is clear that, except in 2011, the total enrolment for these programmes increased, though small, from year to year since 2009.

ii) Improper/inadequate response to demand

The continuing low enrolment of students for PGCAE, PGDAE and MAAE programmes is not due to lack of demand but due to disappointing and dissuading responses given by RCs to the students who contact them either in person or through telephone or e-mail. RC's response is that there is no SC/PSC activated/established for these programmes in the concerned region and hence the same are not on offer under that region. Several such instances have been reported to the programme coordinator through telephonic calls and e-mails, among others, by such disappointed / discouraged students intending to seek admission into these programmes. Then, the Headquarters had duly intervened and gave the standing instruction to all the RCs that, on such ground as mentioned above, no RC should dissuade / discourage the admission seekers or the applicants or deny admission to them. Further, the School and the programme coordinator concerned of these programmes assured that they will take care of the provision of academic support services to students admitted under such RCs which do not have an SC/PSC activated for these programmes. Yet, some RCs keep discouraging / dissuading the admission seekers and the applicants to avoid increase in their workload in providing administrative / facilitative services to these students. Added to this, surprisingly an applicant had even been compelled to give an undertaking to an RC, which so demanded him, that he sought admission into MAAE in spite of concerned RC informing the fact that centre is not activated, there will not be any study support, classes or project support provided by RC to him. It speaks volumes about the nature and intensity of the demand for the programme, and ugliness of the RC's response. On the other hand, even after established demand under such RCs they do not even bother take proper initiative to get an SC/ PSC activated/established for these programmes under concerned regions.

Nevertheless, it can be noticed from Table 3 that 13 RCs have students enrolled for PGDAE, 15 RCs have students enrolled for PGCAE, and 9 RCs have students enrolled for MAAE programmes.

Table – 3

Number of Regional Centres under which students of PGDAE, PGCAE and MAAE programmes are spread: Year-wise

Programme	No. of Regional Centres under which students enrolment is spread						Total No. of RCs under which the students are spread
	2009	2010	2011	2012	2013	2014	
PGDAE	1	8 (7)	10 (2)	11 (1)	11(0)	13 (2)	13
PGCAE	NA	NA	0	5	8 (3)	15 (7)	15
MAAE	NA	NA	1	4 (3)	7 (3)	9 (2)	9

Notes:

Figures in parentheses indicate the number of additional RCs under which that year enrolled students are spread, adding to those RCs of the previous year.

NA - Not Applicable, as PGCAE and MAAE were launched w.e.f. 2011 only.

iii) Limitation of medium of instruction

The three programmes are on offer in English medium only. However, there have been some rare requests from a couple of students who wanted to pursue the programme in Hindi medium. But, continuing low enrolment combined with cost-factor and viability has been a matter of concern in getting the material translated from English medium to Hindi medium.

iv) Limitation in access and provision of student support services

State Resource Centre (SRC) for Adult Education in the state of Kerala is the one and the only one SRC specially established as PSC for PGCAE, PGDAE and MAAE programmes. Establishment of the SRCs existing in other states of India and/or the Departments /Centres of ACEE / LLE existing in conventional universities as special PSCs for PGCAE / PGDAE / MAAE programmes of IGNOU is yet to materialise, which is a qualitative and

meaningful initiative that can actually muster enrolment for these programmes under RCs in other states as well.

In spite of this limitation, 88 students have been enrolled for these programmes – 28 for PGCAE, 31 for PGDAE and 29 for MAAE. Out of the total of 88 students, 27 (31%) are enrolled under one PSC (i.e. SRC for Adult Education existing in Kerala) that provides support services to the students of these programmes under RC at Trivandrum. Further, 28.6% of PGCAE students, 12.9% of PGDAE students and 24.1% of MAAE students are not allotted / attached to any SC/PSC. In other words, they are attached to HQ and/or RC concerned for getting academic and administrative support services related to pursuance of the concerned programme. Therefore, all the RCs which have students enrolled for these programmes under their regions need to take urgent initiative to ensure that at least one SC/PSC is activated for effective implementation of these programmes in their respective regions.

v) Limitations of RCs in providing academic support services related to theory courses

In the absence of at least one SC/PSC activated/established for these programmes under each RC, all such RCs concerned have been expressing their problems and difficulties in providing proper support services such as counselling, evaluation of assignments, etc to the concerned students.

vi) Problems of guidance/mentoring related to practical work/activities

Further, the students enrolled for these programmes who are not attached to any SC/PSC have also been experiencing great disadvantage in getting timely and effective facilitation, support, guidance and mentoring from RC concerned or programme coordinator from the School concerned at the HQ about performing the practical activities related to the programme. Since there are practical components — PGDAE and MAAE have three types of practical components and PGCAE has one type of practical component — these students have been expressing their difficulties in pursuing the programmes. The RC concerned and the programme coordinator of the School concerned at HQ have also been experiencing great difficulty in providing proper guidance and support through distance modes such as postal, telephonic/mobile and e-mail communication.

vii) Good pass percentage

In spite of the above mentioned limitations and problems, there has been good pass percentage — 33% to 67% in PGDAE, and 11.1% to 29% in PGCAE (See Table 4). From relevant records, it was found that out of 11 PGDAE graduates (i.e. students who have completed PGDAE) 8 are from those students who are attached to a PSC specially established for these programmes. In this context, it is most desirable to look at students' pass rates of different programmes of IGNOU (See Lakshmi Reddy, 2002), according to which average pass rate of students of all programmes is 8.85%, pass rate of students of Post-Graduate Diploma in Higher Education (PGDHE) is 2.36% (though hundreds of students are enrolled for it every year), pass rate of students of BA/BSc/BCom programmes is just around one percent (though thousands of students are enrolled for these programmes every year). Therefore, if the students' pass rates of PGDAE / PGCAE programmes are compared with those of other programmes of IGNOU, the situation of these programmes is very encouraging. In other words, or to put it in right perspective with exemplary comparison, each PGDAE graduate (i.e. who had successfully completed PGDAE) can be treated as equal to 100 students enrolled for BA/BSc/BCom programmes (as their students' pass rate is around one percent only), or as equal to 42 students enrolled for PGDHE programme (as its students' pass rate is just 2.36%), or to any such comparative number of students of other programme(s) with low pass rates of students.

Table – 4

Number of Students Enrolled for and Successfully Completed PGDAE, PGCAE and MAAE programmes: Year-wise

Programme	Students	Year					
		2009	2010	2011	2012	2013	2014
PGDAE	Enrolled	6	12	7*	3**	0	3 YCMD
	Successfully Completed	4 (66.7%)	4 (33.3%)	3 (42.9%)	0 (0%)	0	------
PGCAE	Enrolled	NA	NA	0	7	9@	12@@
	Successfully Completed	NA	NA	0	2 (28.6%)	1 (11.1%)	------
MAAE	Enrolled	NA	NA	1**	4***	13****	11 YCMD
	Successfully Completed	NA	NA	0 (0%)	0 (0%)	0 (0%)	------

Notes:

NA - Not Applicable, because PGCAE and MAAE were launched in 2011.

* Indicates that those students who have not completed the programme still have one year to complete it out of maximum duration.

** Indicates that these students still have two years to complete the programme out of maximum duration.

*** Indicates that these students still have three years to complete the programme out of maximum duration.

**** Indicates that these students still have four years to complete the programme out of maximum duration.

YCMD - Indicates that the students enrolled in July 2014 are yet to complete the minimum duration of the programmme so as to become eligible to appear in the relevant Term-End Examination.

@ - Indicates that while those enrolled in January session have six months to complete the programme, others enrolled in July session have one and a half year to complete it out of maximum duration.

@@ - Indicates that those enrolled in January session have one and a half year to complete the programme, while the rest enrolled in July session have two years to complete it out of maximum duration.

viii) Enrolment in 'Adult Education' specialization area under Master of Arts in Education (MAEDU) programme

There are five specialization areas in the second year of MAEDU programme. 'Adult Education' specialization area is one of them. It consists of four courses, viz. MAE-001, MAE-002, MAE-003 and MAE-004 taken from MAAE programme. Admission to MAEDU takes place in both January and July sessions every year, and 'Adult Education' specialization area under MAEDU was first introduced / offered in July 2013 session. Table 5 presents the students of MAEDU who opted for 'Adult Education' specialization area.

Table – 5

Number of Students who Opted for 'Adult Education' Specialization Area under MAEDU Programme: Year-wise and Session-wise

Programme / Specialization Area	Student Enrolment in the year and session			
	2013		2014	
	January session	July session	January session	July session
MAEDU (First Year)	NA	1478	812	1599
MAEDU (Second Year) --'Adult Education' Specialization Area	NA	122 (8.25%)	60 (7.39%)	142 (8.88%)

Note: NA - 'Not Applicable' as 'Adult Education' specialization area was introduced from July 2013 session onwards only.

Since there are five specialization areas including 'Adult Education' and expecting parity of distribution of students among these five areas, the expected preference of students opting for 'Adult Education' specialization area is 20% of enrolment of MAEDU programme. However, the actual percentage of students who opted for 'Adult Education' specialization area in July 2013, January 2014 and July 2014 sessions is 8.25%, 7.39% and 8.88% respectively. It is quite encouraging, though it is short by about 11% to 13% of the expected percentage (20%) for this specialization area. It thus reveals that there is acceptability and demand from the students for pursuing 'adult education' as a specialization area under MAEDU programme.

Scrutiny of relevant records revealed that the percentage of students who opted for AE specialization area is more in the RCs falling under North-Eastern region (36.6%), followed by the RCs falling under Jammu and Kashmir region (26%) and Delhi region (13%), which together account for 75% of those who opted for this specialization area.

C. Requirements and Prospects

• Where there are students already enrolled for PGCAE / PGDAE / MAAE programmes under any RC, it is essential to ensure that there is at least

one existing SC/PSC of BED/MED/MAEDU programme of IGNOU activated for PGCAE, PGDAE and MAAE programmes as well or at least one Department/Centre of ACEE / LLE in conventional Universities or an SRC for Adult Education existing in the concerned state is specially established as PSC for these programmes under each of the concerned RCs.

• There is need for special drive in publicity for PGCAE, PGDAE and MAAE programmes under all RCs in general and more so in the regions where there is no student enrolment at all or low enrolment for these programmes. In doing so, it is essential to ensure that not a single RC dissuades the prospective students or the admission seekers approaching it or the applicants on the ground that there is no SC/PSC activated/established for these programmes, and hence the same are not on offer under such RCs.

• Though the student enrolment is low the gradual spread of enrolment to other regions every year presents very positive sign of its potential for expansion. In addition, good pass percentage of students of PGDAE/PGCAE presents an impressive picture for sustainable growth of these programmes.

• 'Adult education' can be included as an optional course under BED and MED programmes of IGNOU as well.

• If undergraduate programmes are also developed and launched in the discipline of 'adult education' that will help in scaling-up inbuilt systemic publicity for PGCAE, PGDAE and MAAE programmes and student enrolment at undergraduate level will boost the cause of professional development and capacity building in adult education in India in a massive way.

• There is also need for short-term certificate programmes for professional development of adult education functionaries such as Preraks, Instructors, Volunteer-organizers, Nodal Preraks, Supervisors, etc working at the grassroots level.

•Soft copies (scanned versions) of the entire course material of PGCAE, PGDAE and MAAE programmes which were till recently available (not available now) under E-Gyankosh link of IGNOU website are required to be restored as OER material in the larger interest of the students, the faculty, the RCs and the PSCs of IGNOU, among others.

Conclusion

Though 'adult education' programmes are on offer with low enrolment, the increasing spread of enrolment to new RCs and SCs/PSCs across the country on one hand, and good number of students opting for 'adult education' specialization area under MAEDU programme on the other should be seen as quite encouraging trend. It depicts the durable journey of professional development and capacity building of 'adult education' and its great potential for massive emergence in the country as a whole. Further, if one optional course on 'adult education' is also introduced under BED and MED programmes, and undergraduate programme launched in the discipline of 'adult education' and short-term certificate programmes launched for grassroots level functionaries, these will together constitute a comprehensive model for professional development and capacity building of adult education in India. Such a model if emulated by other developing countries will certainly make them realize the strength of adult education in transforming their socio-economic and political scenarios or landscape and also in spreading true harmony, welfare and peace all over the globe.

References

Coolie Verner. (1978). Some Reflections on Graduate Professional Education in Adult Education. *The Canadian Journal of Higher Education*, Vol. VIII-2, pp.39-48.

Lakshmi Reddy, M. V. (2002). Students' Pass Rates: A Case Study of Indira Gandhi National Open University Programmes. *Indian Journal of Open Learning.* Vol.11, No.1, January, pp.103-125.

Lakshmi Reddy, M. V. (2013). *MAEP-001: Handbook on Dissertation Work, Master of Arts in Adult Education.* New Delhi: IGNOU.

Reddy, P. A. (2006). *Three Decades of Progress: Research and Publications* (A compilation). Tirupati: Department of Adult & Continuing Education, Sri Venkateswara University.

Shah, S. Y. (1997). Adult Education in Indian Universities–A Case Study of Jawaharlal Nehru University, *Indian Journal of Adult Education,* Vol.58, No.3, pp.77-88.

Consciousness and Comprehensive knowledge of HIV/AIDS among Young Indian Women: Evidences from Six Indian States

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Prahlad Kumar

Introduction

India is the home of the world's third-largest population suffering from HIV/AIDS (with South Africa and Nigeria) and has seen a sharp increase in the estimated number of HIV infections since the first HIV/AIDS case in India was identified in Chennai, in 1986 (Das gupta et. al. 1994; NACO 1995; Balk& lahiri 1997). In 2007, India's AIDS prevalence rate stood at approximately 0.30%, the 89th highest in the world. According to an estimate almost 2.39 million Indians were found to be HIV positive out of total population of 1.2 billion (NACO 2010). More recent investigation estimates that India had about 1.4-1.6 million HIV infected adults aged 15-49 years (Jha P. et al.2010).

The spread of HIV in India is primarily restricted to the southern and north-eastern regions of the country. Adult HIV prevalence at a national level has declined notably in many states, but variations still exist across the states. However, low prevalence states of Chandigarh, Orissa, Kerala, Jharkhand, Uttarakhand, Jammu & Kashmir, Arunachal Pradesh and Meghalaya shows rising trends in adult HIV prevalence in the last four years. A decreasing trend is also evident in HIV prevalence among the young population of 15–24 years. The estimated number of new annual HIV infections has declined by more than 50% over the past decade (UN 2011). Indian women are comparatively at a greater risk of HIV infection because of their relatively weaker position in the society which gives them lower decision making power, access to various resources and opportunities, for instance, education, and participation in the economic or social activities (Hawkes S. and Santhya K., 2002).

An adolescent and young people have more chances of making relationship in their age group so there is a need of more research on

knowledge, attitude and sexual reproductive health, pregnancy, HIV and safe sex practices in India, which is also supported in study on adolescent sexual and reproductive behavior (Jejeeboy S., 1998).

Study in Assam among married women regarding misconception and knowledge about HIV/AIDS found that socio demographic factor significantly playing measure role to conceptualizing the knowledge of HIV/AIDS (Chakraborty & Hazarika, 2011). Education is most important social factor for the awareness of HIV/AIDS and using family planning. Study on female sex worker in shanghai found that there is need to reinforce for self-protection at the time of oral and anal sex because this is also way to spreading the cause of HIV/AIDS (Cai Y. et. al., 2010). India is undergoing the health transition; HIV/AIDS continued to be major public health challenge in the country. In India for the awareness and spreading the knowledge for preventive approach of HIV/AIDS government has implemented different policies and programme, despite this two in five reported not to heard about AIDS it is very surprising (NFHS 2006-06). Due to low level of awareness and increased risk of HIV/AIDS among women the main objective of the study is to examine the comprehensive knowledge of HIV/AIDS among young married and unmarried women in India and states.

Data Source and Methodology

This study uses the "Youth in India: Situation and Needs 2006-2007 data, undertaken by the International Institute for Population Science Mumbai and the Population Council, New Delhi. The study covered six states of India, namely, Andhra Pradesh, Bihar, Jharkhand, Maharashtra, Rajasthan and Tamil Nadu. The study covers a comprehensive knowledge of HIV/AIDS among young women (married and unmarried) age group 15-24 years. In this paper six questions were asked to check the knowledge of HIV/AIDS. Two questions are related to preventive major of HIV/AIDS and four questions are related to misconception of HIV/AIDS which is given below in description of variable section. Bi-variate and multivariate analysis (logistic regression) has been carried out to understand the socio-economic differentials of comprehensive knowledge of HIV/AIDS among the married and unmarried women in India. The dependent variable has been categorized in two category viz, first-No knowledge and second-comprehensive knowledge. The women who have given right answer of preventive and misconception measurement are treated as comprehensive knowledge of HIV/AIDS.

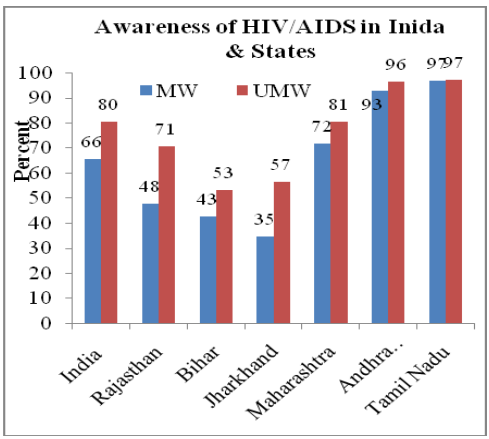
Description of Variables

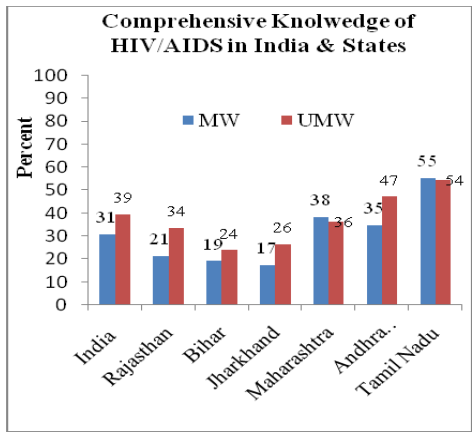
Dependent Variables: Comprehensive knowledge of HIV/AIDS is the response variable used in the study. It is assessed with respect to correct knowledge and misconception. First two questions are preventive of HIV and other is rejection of common misconception. All these are categorized as 0 to 1 scale; (1) indicating correct response and (0) No or otherwise.

Sl. No.	Question	Type of Question
A	Can people reduce their chances of getting the AIDS virus by having just one sex partner?	Preventive
B	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	
C	Can you tell whether healthy looking person can/have HIV/AIDS	Misconception
D	Can people get the AIDS virus from mosquito bites?	
E	Can people get the AIDS virus by sharing food with a person who has AIDS?	
F	Can people get the AIDS virus by hugging someone who has AIDS?	

Independent Variable: The study uses a set of demographic and socio-economic variable like age, education, caste, religion, mass media exposure, wealth index, and residence as predictor variable to understand the linkages with comprehensive knowledge among married and unmarried women.

Findings and Discussion





The Graph queried whether youth had ever heard of infections that were transmitted through sexual contact. Graph one and two suggest that awareness of HIV/AIDS was found virtuous compare to comprehensive knowledge among both young unmarried and married women in India. Every eight unmarried women and more than six married women among ten have heard of HIV/AIDS, whereas every 3rd married women and nearly 4 unmarried women among ten reported of comprehensive knowledge of HIV/AIDS in India. Universal awareness of HIV/AIDS has been reported by married and unmarried women in Tamil Nadu (97%), and in Andhra Pradesh it is found nearly 93% and 97% respectively. State like Jharkhand and Bihar reported less awareness of HIV/AIDS among married and unmarried women compare to Maharashtra and Rajasthan.

In Table-1 given below comprehensive awareness was defined as knowledge of two ways of preventing HIV (specifically, condom use and single partner relations), rejection of common misconceptions about HIV transmission (namely, that HIV can be transmitted through mosquito bites, sharing food or hugging) and awareness that one cannot tell by looking at a person whether he or she has HIV. Finding of comprehensive knowledge of HIV/AIDS among young married and unmarried women by background characteristics in six states of India are presented in the table. Comprehensive knowledge of HIV/AIDS was found low (31%) in married women compare to unmarried women (39%) in India. Variations in comprehensive knowledge among married women can be seen across the six states, i.e.17% in Jharkhand to 55% in Tamil Nadu, whereas among unmarried women comprehensive knowledge was found lowest in state of Bihar (24%) and highest in Tamil Nadu (55 %).

Table -1
Comprehensive knowledge of HIV/AIDS among married and unmarried women age 15-24 age group by background characteristics in six states, India 2006-07.

Background Characteristics	Married						
	Rajasthan	Bihar	Jharkhand	MH	Andhra	TN	India
Age							
15-18	13.5	12.5	12.2	26.1	29.8	43.8	19.3
19-21	21.7	21.3	16.8	33.7	33.7	53.4	30.1
22-24	25.1	23.1	21.1	44.9	37.7	58.2	36.6

Education (in years)							
Up to 5	9.1	8.9	6.8	13.7	18.4	44.1	13.2
06-09	43.8	44.9	31.4	36.3	44.3	55.6	42.9
10 and above	67.4	65.3	65.8	63.4	63.1	64.2	64.2
Caste							
SC /ST	15.7	11.9	11.4	34.7	31.3	51.2	25.5
OBC	20.1	17.7	18.2	37.4	33.0	56.9	29.5
General	37.0	46.9	39.8	40.8	42.7	61.0	41.5
Religion							
Hindu	20.7	18.2	18.2	37.5	35.1	54.8	30.3
Muslim	26.8	26.0	17.1	34.3	30.3	58.9	30.8
Others	25.0	*	11.3	47.6	32.1	64.2	36.1
Mass media exposure							
None of them	8.7	8.9	6.3	14.4	16.2	39.4	12.0
Newspaper and TV	53.7	55.5	52.6	55.5	55.0	63.9	56.6
News paper	23.0	44.1	26.4	30.0	42.4	53.1	36.1
Only TV	26.6	29.5	26.4	30.8	35.7	49.6	35.3
Wealth index							
Poor (up to 40 %)	9.9	13.5	6.8	22.2	24.2	48.5	17.1
Middle (40-60 %)	13.4	22.8	24.1	31.1	33.9	52.5	30.4
Richest (60% +)	33.4	50.0	48.8	49.7	41.9	59.7	46.0
Residence							
Urban	44.2	42.4	37.0	46.4	49.2	57.5	48.5
Rural	17.0	17.5	13.8	33.4	30.6	53.8	25.6
Total	21.4	19.1	17.2	38.1	34.5	55.4	30.6

Background Characteristics	Unmarried						
	Rajasthan	Bihar	Jharkhand	MH	Andhra	TN	India
Age							
15-18	26.9	19.9	22.8	30.0	43.7	49.9	33.1
19-21	55.6	44.2	35.4	45.3	53.0	60.1	51.4
22-24	68.5	59.5	46.2	58.5	60.4	59.5	59.4
Education (in							
Up to 5	6.4	6.1	4.8	7.3	11.0	30.9	9.3
06-09	33.2	26.9	27.6	25.5	38.1	46.3	32.5
10 and above	62.4	62.3	59.8	51.9	62.8	62.7	59.3
Caste							
SC /ST	21.1	10.5	19.4	33.4	43.3	52.2	34.8
OBC	33.0	21.2	26.2	34.0	45.6	55.3	39.8
General	45.4	39.7	43.4	39.6	53.9	55.4	43.5
Religion							
Hindu	33.8	25.0	29.3	36.8	48.1	54.5	40.6
Muslim	23.7	19.1	22.7	30.0	40.0	48.0	29.1
Others	51.1	*	20.2	39.2	44.4	59.3	41.2
Mass media							
None of them	4.3	5.5	3.9	7.0	10.4	34.2	8.0
Newspaper and	50.4	45.9	46.3	43.6	57.2	59.2	51.1
News paper	21.4	21.0	11.8	13.0	43.9	49.8	25.9
Only TV	23.7	29.3	20.0	17.6	25.1	39.8	27.4
Wealth index							
Poor (up to 40	10.3	11.7	9.8	17.3	27.1	43.1	18.7
Middle (40-60	20.3	20.6	28.3	29.1	45.4	52.1	36.9
Richest (60%	45.1	52.2	50.4	45.1	55.3	58.6	51.0
Residence							
Urban	48.2	49.2	43.6	42.7	56.5	57.5	50.0
Rural	26.1	18.9	18.0	30.7	42.1	51.6	32.8
Total	33.5	23.9	26.4	36.3	47.2	54.5	39.4

The level of comprehensive knowledge varies by background characteristics across all states in India. As the age group is increasing from 15-18 to 22-24 in married and unmarried women, comprehensive knowledge is also increasing from 19% to 37% in married women and 33% to 59% in unmarried women. Comprehensive knowledge is strongly associated with education, exposure to mass media, and wealth quintile among married and unmarried women. Young married women who had more than 10 years of schooling, have five times more comprehensive knowledge compared to women having five years of schooling in India. Comprehensive knowledge of HIV/AIDS was found higher who had an exposure of both newspaper and TV, belonging to richest wealth quintiles, living in urban area and belonging to general category. However analyses

clearly investigate that young women (married & unmarried) of Tamil Nadu have highest comprehensive knowledge compare to national and state level.

Table-2 shows the result of multivariate analysis of the comprehensive knowledge of HIV/AIDS. Age, education, mass media exposure, wealth index, residence and states are significantly associated with comprehensive knowledge of HIV/AIDS among married and unmarried women in India. Odds ratio among married women is higher in age group 22-24 ,compared to women below 18 years of age group (OR-1.79; 95% CI=1.58-2.01).

Table - 2
Result of logistic regression showing the determinants of comprehensive knowledge of HIV/AIDS in India, 2006-07.

Background Characteristics	Married women		Un-Married Women	
	Odds Ratio	CI 95%	Odds Ratio	95% CI
Age				
15-18				
19-21	1.46***	1.29-1.65	1.36***	1.25-1.49
22-24	1.79***	1.58-2.01	1.65***	1.47-1.86
Education				
Up to 5 Years				
06-09 years	1.69***	1.46-1.95	1.90***	1.61-2.25
10 and above	2.88***	2.45-3.38	3.92***	3.30-4.67
Caste				
SC /ST/VJNT				
OBC	0.93	0.84-1.03	0.99	0.90-1.08
General	1.14	1.00-1.30	1.06	0.95-1.18
Religion				
Hindu				
Muslim	1.01	0.89-1.16	0.88***	0.78-0.98
Others	1.04	0.87-1.25	1.09	0.95-1.25
Mass Media Exposure				
None of them				
News paper &TV	3.27***	2.80-3.82	3.32***	2.76-4.01
News paper	1.94***	1.51-2.50	1.67***	1.32-2.12

TV	1.80***	1.54-2.12	1.82***	1.48-2.24
Wealth Index				
Poor				
Middle	1.42***	1.26-1.60	1.48***	1.32-1.67
Richest	1.54***	1.37-1.74	1.70***	1.52-1.90
Residence				
Urban				
Rural	0.74***	0.67-0.80	0.85***	0.79-0.92
State				
Rajasthan				
Bihar	1.27***	1.1-1.5	1.16***	1.03-1.31
Jharkhand	0.87	0.8-1.0	0.89	0.79-1.01
Maharashtra	0.91	0.8-1.0	0.69***	0.61-0.78
Andhra Pradesh	1.25***	1.1-1.4	1.25***	1.11-1.41
Tamil Nadu	1.99***	1.7-2.3	1.47***	1.30-1.65

*P-Value ***<0.01, **<0.05, *<0.1; ® Reference Category*

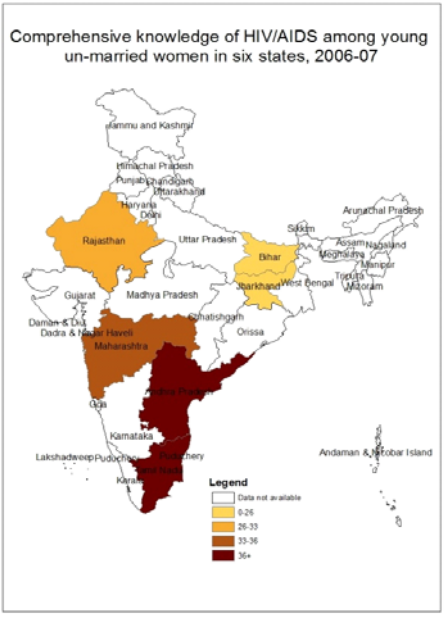
Educational effect on comprehensive knowledge of HIV/AIDS is nearly three times higher in women completed more than 10 years of schooling, compare to women completed five years of schooling (OR-2.88; 95% CI=2.45-3.38). Odds of mass media exposure also indicates more than three times higher knowledge among those women who exposed with newspaper and TV compare to women who not at all exposed (OR-3.27; 95% CI=2.80-3.82). Similar Pattern of comprehensive knowledge among unmarried women also found significant with demographic and economic characteristics. State is also significantly associated with comprehensive knowledge of HIV/AIDS among unmarried women.

Discussion and Conclusions

Findings of the Youth Study presented here highlighted among young married and unmarried women in India in general and in the six states in particular. Study also highlighted the awareness and comprehensive knowledge of HIV/AIDS among young women across the states. Women from the northern states (Bihar, Jharkhand and Rajasthan) were consistently more disadvantaged in getting awareness than those from Maharashtra and the southern states (Andhra Pradesh and Tamil Nadu). The findings of this study suggests that the awareness and comprehensive knowledge of HIV/AIDS still remains low despite several efforts made by NACO and Government of India. The awareness and comprehensive knowledge of HIV/AIDS remains gloomy among married women in the country.

Exposure of mass media, wealth index, and place of residence is also proportionally higher among unmarried women which make a base for developed source of knowledge. Results found that education and mass media exposure (Newspaper and TV) playing measure role to enhance the comprehensive knowledge of HIV/AIDS supported by Bloom and Griffith study in 2007.

The patriarchal nature of Indian society restricts the decision making power of a woman, even if it is related to her health. Women went her husband house so there is little control over resource, and freedom of mobility which influences the knowledge. Global challenge of bulletin of HIV/AIDS has argues that due to ritual and gender inequality in the society women could not protect them self. For the reducing non-durable HIV/AIDS epidemic correct comprehensive knowledge and awareness is the most important preventive tool. In this regard there is a need to highlight the source of awareness (like higher education, mass media exposure and other socio economic factors) for knowledge, and preventing misconception among women. Findings suggest several priority programmatic areas for action to ensure the correct knowledge of HIV/AIDS in India.



Map - 1 ***Map - 2***

Map-1&2depictscomprehensiveknowledgeofHIV/AIDSamongmarried and unmarried women in six Indian states. Map clearly shows that south Indianstatesareinbetteroffpositionintermsofcomprehensiveknowledge ofHIV/AIDScompare tonorthIndiastates.YouthinIndia:SituationandNeeds study provides a comprehensive overview of only six Indian sates, which is a limitation of the study.

References

Balk, D., & Lahiri, S. (1997). Awareness and knowledge of AIDS among In women/ : evidence from 13 states. *Health transition review Supplement, 7*, 421-465.

Cai, Y., Shi, R. Shen, T. Pei, B. Jiang, X. Ye, X. Xu, G. Li, S. Huang, H. & Shang, M. (2010). A study of HIV/AIDS related knowledge, attitude and behaviours among female sex workers in Shanghai China. *BMC public health*, *10*,377.

Chakraborty and Hazarika (2011) Misconception and knowledge regarding HIV/AIDS among Married women in the reproductive Age group in Assam, India. *World Applied science Journal*, 15(7), 966-972.

Dasgupta, P. R. Jain. M.K. and John, T.J. (1994). Government response to HIV/AIDS in India. *Asia and the Pacific* 583-590.

Hawkes, S. & Santhya, K. (2002) Diverse realities: sexually transmitted infections and HIV in India. *Sex Transm Infect*, 78 supplement _1, i31-i39.

HIV/AIDS in India world bank 2012.
http://www.worldbank.org/en/news/feature/2012/07/10/hiv-aids-india.

International Institute for Population Sciences (IIPS) and Population Council, (2010). Youth in India: Situation and Needs 2006-2007 Mumbai.

India sees 50% decline in new HIV infections UN report Hindustan Times April 02, 2011.

Jejeebhoy, S.J. (1998) Adolescent sexual and reproductive behavior: A review of the evidence from India. *Social Science Medicine*, 26 (10) 1275-1290.

Jha, P. Kumar, R. Khera, A. Bhattacharya, M. HIV. Arora, P. Gajalakshmi, V. Bhatia, P. Kam, D. Bassani, G.D. Sullivan, A. Suraweera, W. McLaughlin, C. Dhingra, N. Nagelkerke, N. (2010) Mortality and infection in India: estimates from nationally representative mortality survey of 1.1 million homes. British Medical Journal 320 c621.

National AIDS Control Organization (NACO). 1994. AIDS update: monthly update on HIV infection in India (Report up to 31 March 1994). CARC Calling 7, 2

National Aids Control Organization (2007). Ministry of Health and family welfare Government of India.

National Aids Control Organization (2011). Ministry of Health and family welfare Government of India.

United Nation (2011) special session fact sheets Preventive HIV/AIDS among people; Globle crisis- Global action

http://www.un.org/ga/aids/ungassfactsheets/html/fsyouth_en.htm
United Nation (2011) world aids day report.

http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/201/gr2012/jc2434_worldaidsday_results_en.pdf www.ndtv.com/article/india/world-aids day-india-records-sharp-drop-in-number-ofcases-299730, Dec1, 2012.

Andragogy: The Adult Learning Theory

Shikha Kapur

Introduction

The fundamental process that facilitates the survival and adaptation of human beings is learning. Each learner has their individual learning needs. However when it comes to the theories of adult learning, these theories are based on pedagogical principles, using researches of child learning. The adult learner cannot be treated as an oversized child learner. The distinctive characteristics that set an adult apart from a child learner is that while a child learner is dependent and has to be brought to a classroom or school; the adult learner on the other hand has fully autonomy and comes voluntarily to the learning situation, participating actively in the learning process. They are also very clear about the end results that they anticipate from the learning process and hence the adult learners may drop out of learning activities if their expectations aren't met.

Most of the theories applicable to the child learner do not apply to the adult learners. And consequently the teaching methodologies and strategies used by the teachers in classroom of children cannot be used with adults. The teachers/facilitators of adult learners prior to conceiving, designing or implementing learning programs for their adult learners/clients have to first and foremost understand the Theory of Adult Learning. Malcolm Knowles Andragogical theory of adult learning clearly brings out the distinction between the adult and child learner since it is based on the distinctive and unique characteristics of adult as a learner. The andragogical assumptions propounded by Knowles differ from pedagogical assumptions.

Emergence of Andragogy

Influenced by Eduard Lindeman's work in the mid 1960s, American educator Malcolm Shepherd Knowles began working on

Indian Journal of **Adult Education,** Vol. 76 (2); April-June 2015, pp. 50-60

andragogy-the theory of adult learning. His results were published in his revolutionary book, **The Adult Learner: A Neglected Species in 1973**. The term Andragogy was introduced in 1968 in a series of articles (Rachal, 2002). He contrasted pedagogy with andragogy.

What is pedagogy?

Pedagogy is derived from Greek word where *paeda* means "child" and *agogos* means "to lead"; so it literally means "to lead the child." Pedagogy has been in use since the ancient Greek times. In Ancient Greece, *paidagôgeô* was (usually) a slave who supervised the instruction of his master's son (girls were not publicly taught). This involved taking him to school or a gym, looking after him and carrying his equipment (e.g. music instruments).

"Pedagogy is the art and science of teaching children" (Knowles, 1973). According to Hiemstra and Sisco (1990), under the pedagogical model, the teacher has full responsibility for making decisions about what will be learned, how it will be learned, when it will be learned, and for how long it has to be learnt. The teacher also determines which medium should be used in transmission of learning. Pedagogy is a teacher centered learning process where the teacher is the focal point of the process.

What is Andragogy?

Andragogy was originally used by Alexander Kapp (a German educator) in 1833 in his book, *Platon's Erziehungslehre* (Plato's Educational Ideas). However it fell into disuse and reappeared in 1921 in a report by Eugen Rosenstock-Huessy in which he argued that adult education required special teachers, methods and philosophy, and he used the term andragogy to refer collectively to these special requirements (Bryant and Hans, 1986). Eduard C. Lindeman was the first English writer to pick up on Rosenstock's use of the term. But he used it only twice (Lindeman, 1991).

The term was however used extensively in France, Yugoslavia and Holland 'to refer to the discipline which studies the adult education process or the science of adult education. It was in the mid 60s that Malcolm Knowles name became inextricably linked with Andragogy. Since then he is considered as the 'founding father of adult learning'. He is credited to making Andragogy synonymous to adult education. Knowles rested his Andragogical theory and principles derived from humanistic psychology (Carl Rogers) rather

than basing it on theories of animal learning (behavioural traditions -Ivan Pavlov, B.F. Skinner).

Literally translated from Greek, Andragogy means "man-leading". According to Knowles (1973), "Andragogy is the art and science of helping adults to learn". Andragogy is based on the premise where the teacher manages the learning process and facilitates the acquisition of content by the learners (Hiemstra and Sisco, 1990).

Rather than following 'didactic approach' it emphasises 'problem centred approach' where equality exists between the teacher and the learner. Learning is collaborative between the teacher/facilitator and the learner. Adults learn best when they have control over their learning and in andragogy the focus shifts from the teacher to the learner.

The teacher assumes the role of a facilitator in the process of learning encouraging learner to identify their learning needs and objectives and then entering learning contracts. Hence Knowles integrates two quite different and opposing traditions the humanistic and behavioural traditions and evolves a theory of adult learning.

Andragogy Vs Pedagogy

Adult learning (Andragogy), as opposed to child learning (pedagogy), does not compete with each other and in fact they both lie on a continuum. Pedagogy is really a theory of teaching while Andragogy is really a theory of learning. In fact the term Andragogy can be supposedly equivalent to term pedagogy. In Jarvis's (1985) view, for Knowles, 'education from above' (teacher and student) is pedagogy, while 'education of equals' (facilitator and learner) is Andragogy.

He labelled Andragogy as an emerging technology which facilitates the development and implementation of learning activities for adults. Andragogy is a theory specifically for adult learning. Knowles comparison of the assumptions of Andragogy and pedagogy follows in Table-1 (Jarvis 1985):

Table - 1

Assumptions of Andragogy vs Pedagogy

Assumptions	Andragogy	Pedagogy
The learner's Self Concept	As the learner is mature his self concept moves from being *dependent personality towards (independent) Self-directed human being.* Facilitator/Teacher encourages and nurtures this movement.	*Dependent.* Teacher directs what, when, how a subject is learned and tests what has been learned
The learner's experience	Have a vast reservoir/repertoire of accumulated *experience which is a rich resource for learning* for themselves and for others. Hence teaching methods include experiential ones--laboratory experiments, discussions, problem-solving, field experiences etc.	*Of little worth.* Hence teaching methods are didactic
Readiness to learn	*People learn what they need to know,* so learning programs are organised around life application and sequenced according to the learners' readiness.	*Learners are children and hence learn what society expects them to.* So that the curriculum is standardized.
Orientation to learning	With maturity the person's perspective changes from one of *postponed application of knowledge to immediacy of application* and hence orientation of learning shifts from *subject centeredness to problem centeredness.*	*Learning experiences emphasise acquisition of subject matter.* Curriculum is subject centered.
Motivation to learn	Adults are motivated to learn by *internal/intrinsic* rather than external factors.	It stems from both *internal* as well as *external factors* e.g. reward, awards & praise from teachers and peers.

Andragogy and Pedagogy can be described as the combination of a multidimensional set of variables which includes locus of control, learner characteristics, and situational circumstances. The difference between Pedagogy and Andragogy can further be summed up as under in Table-2:

Table - 2
Pedagogy vs Andragogy

Pedagogy	Andragogy
Mandatory Attendance	Voluntary Attendance
Subject Centered	Problem Centered
Dependent Learners	Independent Learners
Inexperienced Learners	Experienced Learners
Teacher Prescribed Content	Learner Prescribed Content
Learners Grouped by Age Level or Ability	Learners Grouped by Interest or Needs
Learning for Future	Learning for Now
Learners Subordinate to the Teacher	Learners Equal to the Teacher
Rigid, Traditional Structure	Flexible, Alternative Structure
Passive Learners	Active Learners

After understanding what is Andragogy, what is the distinction between Pedagogy and Andragogy and also the various Andragogical assumptions; the next important thing is to understanding its application. The knowledge about Principles of Adult Learning comes in handy during any teaching/training program for adult learners, as the practical application of these Principles facilitates adult learning

Principles of Adult Learning

According to Knowles (1984) the practitioner and theorist of adult education, the 'adult learning principles' that should be applied while teaching/training adults are:

1. Adults are intrinsically motivated and self-directed.
2. Adults need to be involved in the planning and evaluation of their instruction.
3. Adults bring their life experiences (including mistakes) and knowledge to learning situations and their learning is experience based.

4. Adults are relevancy oriented and hence most interested in learning subjects that have immediate relevance to their job or personal life.
5. Adults are practical.
6. Adults like to be respected.

Cross (1981) further adds to these Principles:

7. Adult learning programs should capitalize on the experience of participants.
8. Adult learning programs should adapt to the aging limitations of the participants.
9. Adults should be challenged to move to increasingly advanced stages of personal development.

A few other Principles of adult learning are:

10. Meet individual learning needs of adults.
11. Make course content relevant and coherent.
12. Create and provide a supportive open learning environment for adults that will help them learn.
13. Adults learn at different speeds and through different methods of teaching and training.
14. Progression from 'known to unknown' (experiential learning) and from 'simple to complex' and 'concrete to abstract' (Jarvis, 1985).
15. It is important to keep the learners socio-cultural background and milieu in mind while designing the training/teaching-learning programmes for the adults.
16. Praise and appreciation not only provides encouragement it also improves the confidence levels of the adult learners.
17. Encourage the learners to express and communicate their views, opinions and feelings freely without inhibitions.
18. Recognise the individual capabilities, interests and limitations of the learners. Adults learn at various rates and in different ways according to their intellectual ability, educational level, personality and cognitive learning styles. Teaching strategies must anticipate and accommodate different rates of comprehension of learners.
19. Encourage individual creativity and initiative.
20. Provide immediate feedback on learning results. Feedback must be specific, not general.

21. Reinforcement is a very necessary part of the teaching/learning process through recall, repetitions, memory games, mnemonic (Systematic strategies for strengthening long-term retention and retrieval of information through

keywords, acronyms, rhyming words) strategies and drills.

Vella's (1994) has incorporated Malcolm Knowles Andragogical model and has evolved 12 principles for effective adult learning which include:

1. **Needs Assessment**: Participation of the learner in naming what is to be learned.
2. **Safety** in the environment between teacher and learner for learning and development.
3. **A sound relationship** between teacher and learner for learning and development.
4. Careful attention to **sequence** of content and **reinforcement**.
5. **Praxis**: Action with reflection or learning by doing.
6. **Respect for learners** as subjects of their own learning.
7. Cognitive, affective, and psychomotor aspects: **ideas, feelings, actions**.
8. **Immediacy** of the learning.
9. **Clear roles** and role development.
10. **Teamwork**: Using small groups.
11. **Engagement** of the learners in what they are learning.
12. **Accountability**: How do they know they know?

Components of the Andragogical Process Design

Following the development of understanding about Andragogical assumptions, principles of adult learning, we can now progress to unravel the salient features of the **Andragogical process design** for instruction of adult learners:

1. Foremost is preparing the learner for adult education program. A program that is participatory in nature and caters to the special needs of learner will draw the adult learners to the program.
2. An optimal physical as well as psychological climate for adult learning is necessary for fostering mutual respect, collaboration, trust, supportiveness, openness, authenticity, pleasure, and "humanness."

3. Adult learners are involved in the program planning. Sharing responsibilities alongside their facilitators naturally draws out a sense of remaining committed to the program till the end.
4. Adult learners diagnose their own learning needs regarding acquisition of knowledge, skills and attitudinal change.
5. Adult learners formulate their own learning objectives.
6. Adult learners formulate their own learning plans to meet those objectives.
7. Tools, most prominently learning contracts, are needed to help learners carry out their learning plans.
8. Adult learners are involved in evaluating their own learning.

Andragogy and Self-Directed Learning

The concept of **self-directed learning** is the key to Andragogy. In its broadest sense, self-directed means that the learner takes initiative, with or without the help of others, diagnoses the learning needs, formulates learning goals, identify resources both human as well as non-human material resources, chooses and implements appropriate learning strategies and evaluates the learning outcomes. Being self -directed connotes that the adult student should be allowed to participate fully in evaluating their learning needs, planning, implementing, evaluating the learning activities and experiences. According to Knowles individuals can be assisted in becoming more self-directed when given appropriate learning tools, resources, experiences, and encouragement. Self directed learning is the subject of considerable theory and research among adult educators (Garrison, 1997). Grow's (1991) four **Staged Self-Directed Learning (SSDL) Model** is perhaps the most prominent explanation of the role of self-directed learning in education. It describes four learner stages and the teachers' role at each of these four levels:

Stage 1: Student is a dependent learner. He/she lacks relevant knowledge, skills, experience, motivation and self confidence to pursue educational goals; teacher serves as authority or as coach; examples include drills, informational lectures.

To move them up to next stage requires a delicate balance between encouraging, motivating and demanding performance; it requires warmth, encouragement and support to the extent that learners don't see teacher/ facilitator as a pushover.

Stage 2: Student is an interested, enthusiastic learner who responds to motivational techniques; teacher serves as motivator and guide; examples include guided discussions, informational lectures.

To move them to next stage requires training adult learners in basic skills as goal setting, building confidence, helping them realise their potentials, their different personality types, learning styles and encouraging them to explore and express it.

Stage 3: Student is an involved learner, having skill and knowledge, and sees him/her self as participant in the learning experience; teacher serves as a facilitator, guiding and supporting them; examples include group projects, seminar, discussions facilitated by teacher where both participate as equals.

To move them to next stage, the facilitator brings their experiences and weaves them into the learning situation. The facilitator also helps the adult learners examine themselves, their culture and that of others to explore why they feel about something when they sense they should be feeling something else. The facilitator also empowers the adult learners so they are able to face the challenges posed by life in future.

Stage 4: Student is a self-directed learner, who thrives in an atmosphere of autonomy; teachers serve as a consultant or delegator. The teacher weans the adult learners of being taught and starts teaching invisibly; examples include self directed study groups, individual work, dissertation, internship.

To maintain this stage the facilitator/teacher meets the learners regularly and mentors them, reviews their progress, encourages them to work with others, collaborate and do self evaluation.

The SSDL Model helps match the facilitators/teachers style according to adult learners / trainees stage of self direction and helps them to progress towards greater self direction. This requires time, patience and does not occur overnight.

Conclusion

An adult learner is different from the child learner. Andragogy and Pedagogy helps us in understanding the differences between the two.

Knowledge about the various Andragogical assumptions, principles of adult learning and the knowledge of andragogical process design helps the facilitators to understand the psychological factors which influence adult learning and adults participation in learning experiences. These important areas of study together encompass the field of Theory of Adult Learning.

References

Andragogy. (n.d.). *Dictionary.com Unabridged*. Retrieved March 09, 2015, from Dictionary.com website: http://dictionary.reference.com/browse/andragogy

Bryant, Darrol M., and Hans Huessy (eds.). (1986). *Eugen Rosenstock-Huessy: Studies in His Life and Thought*, Edwin Mellen: Toronto.

Cross, K.P. (1981). Adults as Learners. San Francisco: Jossey-Bass.

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly, 48,* 18–33.

Grow, Gerald. (1991). Teaching learners to be self-directed. *Adult Education Quarterly, 41,* 125–149.

Hiemstra, R. and Sisco, B. (1990). *Individualizing Instruction*. San Francisco: Jossey-Bass. Jarvis, P. (1985). *The Sociology of Adult and Continuing Education,* Beckenham: Croom Helm.

Kapp, A. (1833). Die andragogik ober bildung im mannlichen alter. Platons Erziehungslehre, als Padagogik fur die Einzelnen und als Staatspadagogik. Germany: Minden und Leipzig.

Knowles, M. S. (1973). The Adult Learner: A Neglected Species. Houston, TX: Gulf Publishing Company.

Knowles, M. S. (1980) The Modern Practice of Adult Education. Andragogy versus Pedagogy, Englewood Cliffs: Prentice Hall/Cambridge.

Knowles, M. S. (1984). Andragogy in Action: Applying Modern Principles of Adult Learning. San Francisco, CA: Jossey-Bass.

Lindeman, E. C. (1926a). Andragogik: The method of teaching adults. *Workers' Education*, 4, 38.

Lindeman, Leonard, E. (1991) *Friendly Rebel. A personal and social history of Eduard C. Lindeman*, Adamant, Vermont: Adamant Press.

Pedagogy. (n.d.). *Dictionary.com Unabridged*. Retrieved March 09, 2015, from Dictionary.com website: http://dictionary.reference.com/browse/pedagogy

Rachal, J.R. (2002). Andragogy's Detectives: A critique of the present and proposal for the future. *Adult Education Quarterly,* 52 (3), 210-227.

Vella, J. (1994). *Learning to Listen, Learning to Teach*. San Francisco: Jossey-Bass, 3-22.

A Study on the Attitude of Students of Education towards E-Learning

B. Krishna Reddy
G. Srilatha

Education is an instrument for social change. Therefore the purpose of education is not just making a person literate but to add rational thinking to his/her life. Learning plays a vital role in one's own life. Several approaches can be used to facilitate learning. Challenges of Globalization have brought a different frame of reference to the process of learning and Process of learning is highly impacted by e-Learning.

The National Curriculum Framework (2005) in its "Systematic Reforms for Curriculum Changes" stated the role of teachers in improving the teaching-learning process by developing new methods and strategies of classroom teaching. The NCERT (2000) in its "National Curriculum Framework for School Education: A Discussion Document", has observed that the revolution in new technologies constitute a change fundamental converting the information society into a knowledge society. The NPE (1986) and 1992 clearly stated in Chapter-8 that modern technologies would bypass several stages and sequences in the process of developments encountered in the earlier decades.

E-Learning is an approach to facilitate and enhance learning using information and communication technologies. It covers a wide set of applications and processes, such as web - based learning, computer based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, Intranet (Local Area Network), extranet (Wide Area Network), audio and video tapes; satellite broadcast, internet TV, CD-ROM, and more. E-Learning provides faster learning at reduced costs, increases access of learning, and clear accountability for all participants in the learning process. Under the computer education programme, its applications are introduced in the curriculum of teacher education and all the students are expected to apply computer applications in their research and teaching learning processes. With all the facilities being provided, whether the students are possessing favorable attitude towards e-Learning is a question to be to be answered.

Indian Journal of **Adult Education,** Vol. 76 (2); April-May 2015, pp. 61-69

Need of the study

Learning is considered to be an essential component for the development of individual and collectiveness. E-Learning is self directed, allowing students to choose contents and tools appropriate to their interests, needs and skill levels. It fosters greater student interaction and collaboration and it accommodates multiple learning styles using a variety of delivery methods geared to different learners. E-learning is considered to be a more effective way of learning and teaching in larger group of students, thereby providing consistency in educational quality. The attitude towards e-Learning would influence the learning of any individual. Therefore the students of education are not different from that of users of e-gadgets who would enter the teaching profession and who would use the e-Learning technology during their teaching learning process. Hence the present problem is undertaken to study the attitude of students of education (M.Ed) towards e-Learning and to understand the influence of various variables.

Statement of the problem

"A study on the Attitude of students of Education towards e-Learning"

Operational definition of the terms used in the study

1. Students of education are defined as the students pursuing Master of Education (M.Ed) on whom the study is aimed at.
2.. Attitude: The attitude is defined as the mindset of the students of education toward e-learning which was assessed using the scale developed by the investigator following the principles of Likert's five point scale model.

Objectives of the study

1. To study the attitude of M.Ed students towards e-Learning in general
2. To study the M.Ed students' attitude towards e-Learning with regard to the variables: Gender, Caste, Management, Locality, Educational qualification.

Hypotheses

The following hypotheses have been set-up for testing:

1. There would not be a significant difference between male and female M.Ed., students in their attitude towards e-Learning.
2. There would not be any significant difference among OC, BC, SC and ST M.Ed., students in their attitude towards e-Learning.
3. Management as a variable has nothing to do with the attitude of M.Ed., students towards e-learning
4. There exists no significant difference between rural and urban M.Ed students' attitude towards e-Learning.
5. There exists no significant difference between Under Graduate and Post Graduate M.Ed students' attitude towards e-Learning.

Methodology

Survey method was followed for the study and the three point attitude scale observing the norms of Likert's method for assessing the attitude of the students towards e-learning was developed by the investigator for collecting the data. Content validity and face validity were established. The reliability of the tool was established by employing split-half method, and it was found to be 0.70 (Spearman brown formula was used). The tool consisted of 25 statements.

Sample of the study

The two institutions having M.Ed., course in Warangal town were selected for the collection of data and purposive sampling method was employed. Investigator personally administered the tool on the students. The sample comprised of 62 students.

Table-1
Distribution of sample

S.No	Variable		Size of sample	Total
1	Gender	Male	36	62
		Female	26	
2	Caste	OC	6	
		BC	42	
		SC	10	62
		ST	4	
3	Management	Government	38	62
		Private	24	
4	Locality	Rural	40	
		Urban	22	62
5	Educational qualification	Graduation with M.Ed	53	62
		PG with M.Ed	9	

The data thus collected was analyzed on the basis of the objectives set for the study using appropriate statistical techniques.

Analysis and interpretation of data

The data collected from 62 respondents was analyzed as per the weights given to the responses following the Likert's method of summating ratings. The weights given for positive statement is three for agree, two for neutral and one for disagree and for the negative statement it is reverse and the number of respondentsfor each item are given in Table-2

Table-2
Number of respondents on each statement of the scale

Statement	Agree	Neutral	Disagree	Total No of responses
e- Learning is not important for learning.	42	3	17	62
e-Learning enhances my carrier prospects	43	10	9	62
e-Learning helps to learn according to individual needs	47	2	13	62
e- Learning does not he lp to learn at learners own speed.	42	5	15	62
e-Learning materials are not attractive	42	12	8	62
e-Learning makes learning not difficult for me	19	9	34	62
e-Learning helps to learn actively	49	5	8	62
Using e-Learning in my Learning is enjoyable and stimulating	41	8	13	62
e-Learning Provides flexible interaction with my teachers and friends	36	9	17	62
I dislike working with machines	43	10	9	62
I think that e -Learning can replace/fulfill the teacher's role	36	10	16	62
I feel it is very costly	35	7	20	62
I feel it evolves all senses to learn more with little time	41	6	15	62
I think that e -Learning provides knowledge without help of supervisor.	19	12	31	62

e-Learning not requires physical attendance	33	9	20	62
I feel e -Learning provides global research opportunities	46	7	9	62
I feel that e -Learning materials are not easily accessible	28	16	18	62
e-Learning do not provide user friendly environment	37	12	13	62
I think that it is obstacle for Foreign language learning	19	10	33	62
e-Learning provides digital library facility	43	8	11	62
e-Learning provides endless freedom to learner	41	8	13	62
I feel e -Learning is far away from real life.	19	18	25	62
e-Learning makes me feel tired and exhausted	17	20	25	62
e-Learning makes me feel that subject matter more interesting	45	6	11	62
I learn more from e -Learning classroom than traditional class room learning	37	5	20	62

The data of 62 students was analyzed and the mean attitude score of M.Ed., students was 57.75. This has showed that 77% of the students has favorable attitude towards e-learning.

Testing of Hypotheses

Hypothesis-1

There would not be significant difference between male and female M.Ed., students in their attitude towards e-Learning.

To test the above hypothesis the data was grouped into male and female and the mean scores of the two groups were calculated along the with SDs and the test was employed to find out the difference if any in their attitudes towards e-Learning. The results of the test are shown in the table given on the next page:

Table-3
Showing the mean values, SDs and the t value

Gender	N	Mean	SD	T-test	Significance
Male	36	57	6.93	1.34	Not significant
Female	26	58.8	3.64		

Computed t value is less than 1.96 for 0.05 level of significance, which is not significant. Therefore, Null hypothesis is accepted. In other words there is no significant difference between the male and female M.Ed., students in their attitude towards e-Learning. The gender of the students is not the influencing variable of their attitude towards e-Learning.

Hypothesis-2

There would not be any significant difference among OC, BC, SC and ST M.Ed., students in their attitude towards e-Learning.

To test the above hypothesis the data was grouped into OC, BC,SC and ST and the mean scores of the four groups were calculated along with the SDs and the f test was employed to find out the difference, if any, intheir attitudes towards e-Learning. The results of the f test are shown in the table given below:

Table-4
Mean values, SDs and the F value

Caste	N	Mean	SD	f-test	Significance
OC	6	60.5	0.77	1.00	Not Significant
BC	42	57	0.75		
SC	10	59.2	0.75		
ST	4	58	0.99		

Computed f value is not greater than 2.79 for 0.05 level of table value. Therefore null hypothesis is accepted. Caste is not able to influence the attitude of M.Ed students towards e-Learning and the mean scores are not able to bring the difference to reject the null hypothesis. Of the groups categorized on the basis of caste, OC group is more favourable towards e-Learning.

Hypothesis-3

Management as a variable has nothing to do with the attitude of M.Ed., students towards e-Learning

To test the above hypothesis the data was grouped into Government and private colleges and the mean scores of the two groups were calculated along the with SDs and the t test was employed to find out the difference, if any, in their attitudes towards e-Learning. The results of the test are shown in the table given below:

Table-5
Mean values, SDs and the t value

Management	N	Mean	SD	T-test	Significance
Government	38	59.21	0.74	19.73	Significant
Private	24	55.45	0.76		

Computed t value is greater than 1.96 and 2.58 which is significant. Therefore Null hypothesis is rejected at 0.05 and 0.01 levels of significance. So there is a significant difference with respect to the mean scores of students of Government and private managements. The result showed that the students pursuing studies in Government institutions have favourable attitude towards e-Learning than the students of private colleges.

Hypothesis-4

There exists no significant difference between rural and urban M.Ed students' attitude towards e-Learning.

To test the above hypothesis, the data was grouped into urban and rural and the mean scores of the two groups were calculated along with the SDs and the results of the t test are given below:

Table-6
Mean values, SDs and the t value

Location	N	Mean	SD	T-test	Significance
Urban	22	60.45	.86	19.21	Significant
Rural	40	56.3	.77		

Computed t value is greater than 1.96 and 2.58 of table value at 0.05 and 0.01 leve of significance. Therefore Null hypothesis is rejected at 0.05 and 0.01 level of significance. Urban students have more inclination towards e-Learning. This does not mean the rural students are far behind the urban students and the score revealed that even rural students are equally interested in e-Learning

Hypothesis-5

There exists no significant difference between Under Graduate and Post Graduate M.Ed students' attitude towards e-Learning.

The above hypothesis was tested using the t test for which the mean scores of the two groups' viz., postgraduate and undergraduate students were calculated along with their SDs. The results of the t test are shown in the following table:

Table-7
Mean values, SDs and the t value

Qualification	N	Mean	SD	T-test	Significan
PG	53	57.56	5.96	0.7	Not Significan
UG	9	58.88	5.03		

Computed t value is less than 1.96 for 0.05 level of significance. Therefore the Null hypothesis is accepted. In other words students with post-graduation and students with graduation are not different in their attitude towards e-Learning and the variable 'management' is not able to influence the attitude of the students towards e-Learning.

Major Findings

1. In the total sample of 62 M.Ed students 77% (mean 57.75, variance is 33.75) of M.Ed students showed favorable attitude towards e-Learning.
2. Caste, Management, Locality had strong influence on attitude of students towards e-Learning.
3. Gender, Educational qualification of M.Ed students had no influence on their attitude towards e-Learning.

Conclusion

The study revealed that 77% of M.Ed students had favorable attitude towards e-Learning. The trend indicates positive attitude on their readiness to follow e-Learning classes. Therefore the instruction need to be done using the e-Learning materials and this paves way for better results among the students in their academic subjects. The educational system creates comprehensive and collaborative learning climate with the usage of e-Learning system and every class room needs LCD projectors with laptop and the students may be encouraged to learn the application of computers for solving various educational problems.

References

Best J.W& Khan J.V (2006), Research methods in Education (9th ed) Dolrling Kindersley, Pvt. Ltd. India.

Hendry E. garrett (2007), Statistics in Psycology and education, Paragon International Publishers, New Delhi-110002

S.K Mangal (2008), Statistics in Education (2nd ed) Prentice Hall of India.

Marami Goswami (2011) Measurement and Evaluation in Psychology (5thed), Neelkamal publications Pvt. LTD.

INTEL-X-PDITTE towards Excellence in Education (2004), Hand book of Teacher Educators.

INTEL- Research studies on the impact of ICT in education: Fostering Excellence Through Innovation.

Sivakumar, D. "Attitude towards e-Learning among prospective Teachers". EDUTRACKS., Feb 2012.

Literacy Rate in India: A Census Based Analysis

Annie George

It is a universally accepted fact that literacy rate is a vital indicator of social and economic development in any society. The Census of India defines literacy rate as the proportion of literates to the total population in the age group 7 years and above. A significant improvement in the literacy rate has been observed, *notably in respect of female literacy,* in the country over the last decade. As per Census 2011 the overall literacy rate of India constitutes 73% with male literacy being 80.9% and female literacy 64.6%.

The decennial census data on literacy shows that over the last five decades, there has been an impressive improvement in the literacy rates of India. It is important to mention here that from 1951 to 1971, the age group 5 years and above, was considered, for calculating India's literacy rates by the Census, but from 1981 onwards the age group 7 years and above has been considered for estimating the literacy rates in India. The overall literacy rate of India, as per Census 1961 was only 28.3% but increased to 34.45% in 1971 (an increase of 6.15%), to 43.57% in 1981, to 52.21% in 1991, (an increase of 8.64%) and to 64.84% in 2001 (an increase of 12.63%) the highest ever increase over any one decade.

Table 1: Literacy rates in India over 1951-2011

Year	Total	Male	Female	Male-Female Gap
1951	18.3	27.2	8.9	18.3
1961	28.3	40.4	15.4	25.1
1971	34.5	46.0	22.0	24.0
1981	43.6	56.4	29.8	26.6
1991	52.2	64.1	39.3	24.8
2001	64.8	75.3	53.7	21.6
2011	73.0	80.9	64.6	16.3

Census 2011 observes an increase of 8% in the overall literacy level as compared to 2001 census. It is also evident that female literacy rate has doubled vis-à-vis the male literacy rate over the last decade. Also an extremely positive development is that, the literacy gap between males and females has declined to 16% in 2011.

Further the improvement in the literacy rate over the decade with regard to rural areas is two times the urban areas. Table-2 gives the literacy rates by sex and residence. It is evident from the table that the improvement in female literacy is better than males in respect of both rural and urban areas. Besides, the gender gap in literacy has come down from 24.6% in 2001 to 19.3% in 2011 in respect of rural areas and from 13.4% in 2001 to 9.7% in 2011 in respect of urban areas.

Table-2 Literacy Rates by Sex and Residence (in %)

	Persons			Males			Females		
	2001	2011	D	2001	2011	D	2001	2011	D
India	64.8	73.0	8.2	75.3	80.9	5.6	53.7	64.6	10.9
Rural	58.7	67.8	9.1	70.7	77.2	6.5	46.1	57.9	11.8
Urban	79.9	84.1	4.2	86.3	88.8	2.5	72.9	79.1	6.2

A significant feature of 2011 Census is that the total number of illiterates has come down from 304 million in 2001 to 283 million – a decline of 21 million. Another interesting feature is that out of 203 million literates added during the decade, females (*105 million*) outnumber males (*98 million*). As mentioned earlier, out of 21 million in the number of illiterates declined, females (*13.6 million*) outnumber males (7.9 million). Thus these variations clearly indicate that the gender gap in literacy level is in fact fast shrinking. There are, however, large inter-state variations in literacy rates in the country. For instance, while the proportion of literates is the highest in Kerala with 94%, in Bihar it is just over 60% as per 2011 Census. Although variations in the literacy rates have declined over time, disparities can be seen if one takes into account the rural-urban differences or differences between male and female literacy rates. In this context, the primary objective of this study is to analyze the current literacy and illiteracy rates and changes over the last decade in the Indian context, at the national and sub-national levels, based on the final data of Census 2011.

Gender and Regional Variations in Literacy

During the last decade, there has been a relatively greater progress in the female literacy rate. The gender gap also has declined substantially in 2011 corresponding to 1991 and 2001 (see Table - 3). The Male – female differential in the literacy rates which was 24.8 percentage points in 1991 and 21.6 percentage points in 2001 decreased to 16.3 percentage points in 2011, indicating a substantial improvement in respect of females. The progress in female literacy is also evident, as reflected by a decrease in the absolute number of illiterate females between 2001-2011 (see Tables - 4 and 5). In 2001 the number of male illiterates in the country which was

110.64 million, has come down to 102.71 million in 2011,i.e., a decrease of 7% during2001-2011 (it was *16.52% over the decade 1991-2001*).Over the same period, the number of female illiterates has decreased from 193.50 million to 179.88 million, i.e., a decrease of about 7 %(*it was just 5.1% over the decade 1991-2001*).It is also, interesting to note here that over the last decade, across 11 states ,the male - female gap is higher than the national average, while in and the remaining states including 7 union territories ,it is below the national average. A minimum differential in the gender disparity is found for the states of Kerala (4.0), Meghalaya (3.1) and Mizoram (4.1) (see Table - 3).

India consists of 28 States and 7 Union Territories (before the bifurcation of Andhra Pradesh). Of these 17 states including all the 7 Union Territories exhibit literacy rates above the National level of 73 percent. Among the states, Kerala tops the list with a total literacy rate of 94.0 percent followed closely by Lakshadweep (*91.85 %*) and Mizoram (*91.33%*). Bihar accounts for the lowest literacy rate in India over the last decade, similar to 1991-2011.

States having literacy rates below the national average are Andhra Pradesh, Arunachal Pradesh, Assam, Jammu & Kashmir and all the EAG (*Empowered Action Group*) (EAG states are some of the most backward states identified by Empowered Action Group of the Government of India for special attention) states excluding Uttarakhand, while male literacy rates of only 11 states are below the national average. States with female literacy rates below the national average are Andhra Pradesh, Arunchal Pradesh, Jammu & Kashmir and Dadra and Nagar Havelli and all the EAG states except Uttarakhand. It is evident from Table-2 that the literacy rates for all the three categories (*Total, Male & Females*) are higher for other states as compared to all the EAG* states. Among the EAG States, Uttarakhand occupies the top spot in terms of literacy rate and is well above the National literacy rate. Male and female literacy is also the highest in Uttarakhand with 87.4 and 70.1 percent respectively. But it is satisfying to note that male literacy levels in EAG states are comparable with those of Non EAG states. However this is not the case with female literacy; female literacy of EAG states is below the national average (*64.64 percent*). Bihar also has recorded the lowest female literacy rate over the last decade (*51.5 percent*).

Between 2001 and 2011, Mizoram has registered the lowest increase in the literacy rate (2.5 percentage points), followed by Kerala (*3.1 percentage points*); this is primarily due to a high literacy rate in these states in the base year (Table-3). North-Eastern states have registered an increase of about 10 percentage points in the literacy rates over the last decade. Among the EAG states, Bihar has witnessed the highest increase in literacy over the last decade *(i.e; 14.8 percentage points*), while Chhattisgarh and Rajasthan the lowest increase (5.6%). Among the major states, the literacy rate has increased in Gujarat (*8.93 percentage points*) Assam (*8.89 percentage points*) and Karnataka (*8.76 percentage points*) over the said decade. While observing the percentage increase, Bihar has made a significant progress in

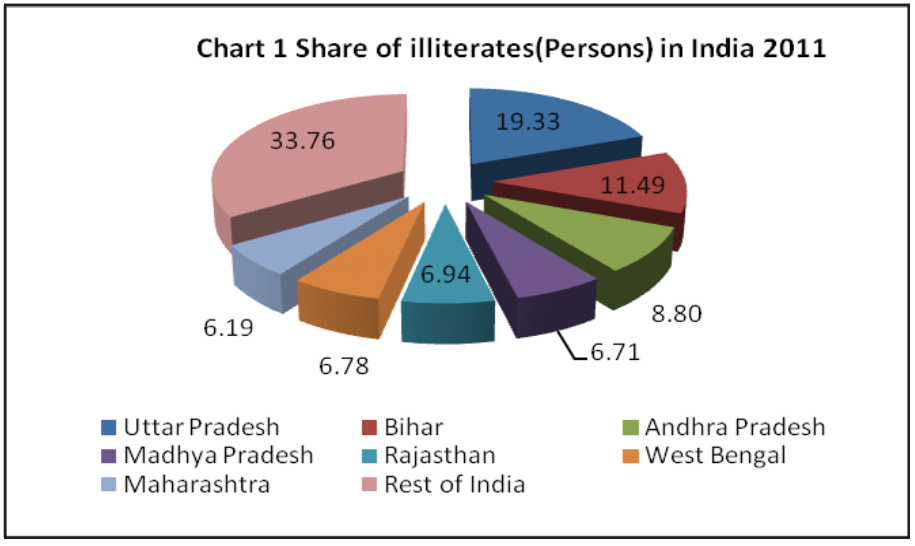
female literacy (*growth of 18.4%*).Among the major states Bihar, Uttar Pradesh, Odisha and Karnataka have achieved more than a 10% increase in male literacy.

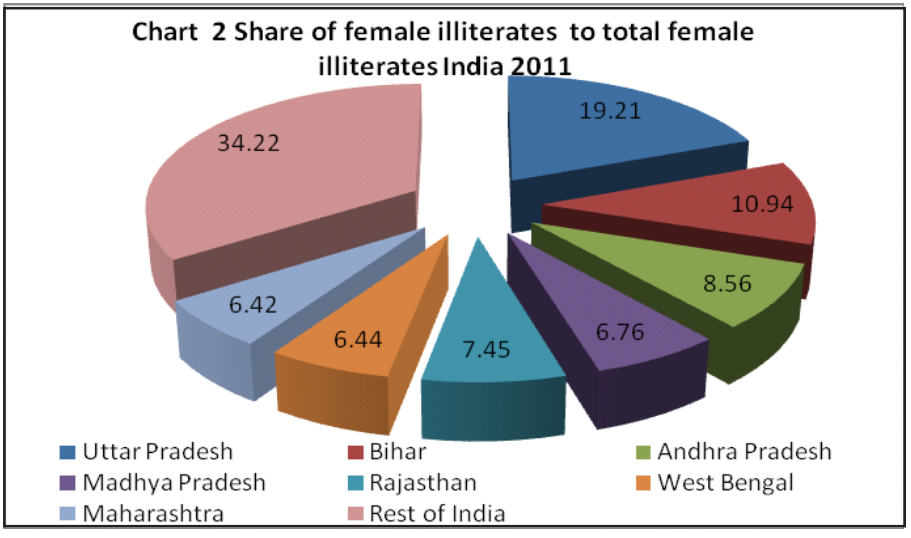
Table - 3
State –wise literacy rate by sex in India over the decade: 2001 – 2011

STATE/UT	Literacy Rate – Census 2011			Literacy rate Census 2001	Change in Literacy Rate over the decade (2001-2011)
	Persons	Male	Female		
Non EAG States					
Andhra Pradesh	67.0	74.9	59.2	60.5(70.3*,50.4**)	6.5
Arunachal Pradesh	65.4	72.6	57.7	54.3(63.8*,43.5**)	11.1
Assam	72.2	77.9	66.3	63.3(71.3*,54.6**)	8.9
Goa	88.7	92.7	84.7	82.0(88.4*,75.4**)	6.7
Gujarat	78.0	85.8	69.7	69.1(79.6*,57.8**)	8.9
Haryana	75.6	84.1	65.9	67.9(78.5*,55.7**)	7.7
Himachal Pradesh	82.8	89.5	75.9	76.5(85.3*,67.4**)	6.3
J&K	67.2	76.8	56.4	55.5(66.6*,43.0**)	11.7
Karnataka	75.4	82.5	68.1	66.6(76.1*,56.8**)	8.8
Kerala	94.0	96.1	92.1	90.9(94.2*,87.7**)	3.1
Maharashtra	82.3	88.4	75.9	76.8(85.9*,67.0**)	5.5
Manipur	79.2	86.1	72.4	70.5(79.5*,60.1**)	8.7
Meghalaya	74.4	76.0	72.9	62.6(65.4*,59.6**)	11.8
Mizoram	91.3	93.4	89.3	88.8(90.7*,86.7**)	2.5
Nagaland	79.6	82.8	76.1	66.6(71.2*,61.5**)	13.0
Punjab	75.8	80.4	70.7	69.6(75.2*,63.4**)	6.2
Sikkim	81.4	86.6	75.6	68.8(76.0*,60.4**)	12.6
Tamil Nadu	80.1	86.8	73.4	73.5(82.4*,64.4**)	6.6
Tripura	87.2	91.5	82.7	73.2(81.0*,64.9**)	14.0
West Bengal	76.3	81.7	70.5	68.6(77.0*,59.6**)	7.7
EAG States					
Bihar	61.8	71.2	51.5	47.0(59.6*,33.1**)	14.8
Chhattisgarh	70.3	80.3	60.2	64.7(77.4*,51.9**)	5.6
Jharkhand	66.4	76.8	55.4	53.6(67.3*,38.8**)	12.8
Madhya Pradesh	69.3	78.7	59.2	63.7(76.1*,50.3**)	5.6
Odisha	72.9	81.6	64.0	63.1(75.4*,50.5**)	9.8
Rajasthan	66.1	79.2	52.1	60.4(75.7*,43.8**)	5.7
Uttar Pradesh	67.7	77.3	57.2	56.3(68.8*,42.2**)	11.4
Uttarakhand	78.8	87.4	70.0	71.6(83.3*,59.6**)	7.2
Union Territories					
A & N Islands	86.6	90.3	82.4	81.3(86.3*,75.2**)	5.3
Chandigarh	86.1	90.0	81.2	81.9(86.1*,76.5**)	4.1
D & N Haveli	76.2	85.2	64.3	57.6(71.3*,40.2**)	18.6
Daman & Diu	87.1	91.5	79.6	78.2(86.7*,65.6**)	8.9
Delhi	86.2	90.9	80.8	81.7(87.3*,74.7**)	4.5
Lakshadweep	91.8	95.6	88.0	86.7(92.5*,80.5**)	5.1
Puducherry	85.8	91.3	80.7	81.2(88.6*,73.9**)	4.6
INDIA	**73.0**	**80.9**	**64.6**	**64.8**(75.3*,53.7**)	8.2

Source: *Final Population Totals: India, Census of India, 2011 [* male, ** female]*

Although there has been a remarkable improvement in the literacy rates over the last decade, there are still 282.59 million illiterates including 179.88 million female illiterates (64.62%). Infact, more than 50% of illiterates are found in 5 states (Uttar Pradesh, Bihar, Andhra Pradesh, Madhya Pradesh and Rajasthan (Chart - 1). In absolute terms, nearly 150 million illiterates are found in these states with more than 50% of them being females (Chart-2).





The percentage shares of females in the total illiterates for the selected states are shown in Table-3. While examining the share of females to total illiterates, it becomes clear that, it is very high in respect of Uttarakhand, Himachal Pradesh,

Maharashtra, Tamil Nadu, Gujarat and Kerala. On the other hand, in terms of female literacy rate for 2011, Kerala tops the list, while Himachal Pradesh takes the 10th rank, Maharashtra 13th rank, Gujarat 17th and Uttarakhand 18th rank. It indicates that even in educationally as well as socially and economically advanced states, most of the illiterates happen to be females.

Table - 4
Percentage Share of females in the Total illiterates for selected states

Himachal Pradesh	69.26
Uttarakhand	69.89
Kerala	69.16
Chhattisgarh	66.71
Gujarat	66.28
Maharashtra	65.99
Rajasthan	68.29
Madhya Pradesh	65.79
Andhra Pradesh	62.16
Tamil Nadu	66.81

For 2011, the percentage change in the number of illiterate persons is negative in 3 states namely Rajasthan, Chhattisgarh and Madhya Pradesh; all the three states are located in the Northern region and are categorized as EAG states (Table-4). Kerala has witnessed about a 30% decline in the number of illiterate persons over the decade 2001-2011. 15% decrease in the number of illiterates person during the same period was in Gujarat and Odisha. Many states have shown more than a 10% decrease in the number of illiterate persons.

With respect to a reduction in the number of illiterates in the country, only three states have contributed negatively namely R*ajasthan, Chhattisgarh and Madhya Pradesh*, While the highest positive contribution has come from Uttar Pradesh (19.6%) and the least from Rajasthan *(-6.94*). Odisha, Maharashtra, Karnataka and Tamil Nadu have made a contribution of around 5% towards a reduction in the number illiterates in the country whereas Bihar has made a contribution of about 12% towards a reduction in the number of illiterate persons. Uttar Pradesh, Bihar, Karnataka and West Bengal together have made a contribution of almost 50 percent towards a decline in the total number of illiterates in the country.

Uttar Pradesh has contributed the maximum (*26.39%*) to the decadal decrease (2001-2011) in the number of male illiterates in the country (see Tables - 6 & 7) followed closely by Bihar, West Bengal, Gujarat, and Karnataka have contributed more than 5% towards a decline in the number of male illiterates, while Rajasthan, Chhattisgarh and Madhya Pradesh have contributed negatively to the decadal decrease

Chhattisgarh and Madhya Pradesh have contributed negatively to the decadal decrease in the number of male as well as female illiterates. Uttar Pradesh and Bihar have made a huge contribution to the decline in the number of female illiterates in the country, whereas Rajasthan has made a significant negative contribution to the decadal decline in the number of female illiterates. The contributions of Uttar Pradesh (*15.68*), Bihar (*10.71*), West Bengal (*13.22*), Maharashtra *(11.96*) and Karnataka (*8.69*) taken together, amount to a total 60% decline in the number of female illiterates in the country.

To understand further the regional variations in the literacy rates, an analysis has been carried out at the district level. According to 2011 census, out of 640 districts, only 15 districts have achieved literacy rates equal to or less than 50% (*3 districts each from Chhattisgarh, Madhya Pradesh and Uttar Pradesh, 4 from Odisha and one district each from Arunachal Pradesh and Jharkhand)*; 63 districts in the range of 50-60%; 182 districts in the range 60-70%; 222 districts in the range 70-80% and 158 districts in the range of more than 80%. Districts with more than 90% literacy rate are found located in Kerala i.e, 11 districts out of 14 districts *(55%)*), Mizoram (4 districts, 20%), Puducherry, Lakshadweep, Nagaland, Maharashtra and Tamil Nadu (one district, each, 5%). Less than 3% of the districts (17) have achieved female literacy rates less than 40%; 12.8% (82) of the districts in the range of 40-50%; 24.7% (158) of the districts in the range 50-60%; 27.7 % (177) of the districts in the range 60-70%; 21.4% (137) of the districts in the range 70-80% and 10.8% (69) of the districts more than 80%.

Table – 5 Details of Illiteracy across states and India

STATE/UT	Number of Illiterates		Decadal decrease in the total No. of illiterates	% Change	State-wise contribution to decrease (in %)
	2011	2001			
Andaman and Nicobar Islands	45422	58236	12814	22.0	0.02
Andhra Pradesh	24881215	26103827	1222612	4.7	8.80
Arunachal Pradesh	405534	407312	1778	0.4	0.14
Assam	7389469	8142099	752630	9.2	2.61
Bihar	32460935	35082869	2621934	7.5	11.49
Chandigarh	130578	141777	11199	7.9	0.05
Chhattisgarh	6503587	6105738	-397849	-6.5	2.30
Dadra and Nagar Haveli	69584	76387	6803	8.9	0.02
Daman and Diu	27907	30026	2119	7.1	0.01
Delhi	2037720	2168894	131174	6.0	0.72

Goa	148447	216138	67691	31.3	0.05
Gujarat	11569072	13310863	1741791	13.1	4.09
Haryana	5371753	5715350	343597	6.0	1.90
Himachal Pradesh	1046968	1243142	196174	15.8	0.37
Jammu and Kashmir	3455164	3850611	395447	10.3	1.22
Jharkhand	9270570	10211801	941231	9.2	3.28
Karnataka	13286942	15233500	1946558	12.8	4.70
Kerala	1797282	2562540	765258	29.9	0.64
Lakshadweep	4665	6876	2211	32.2	0.00
Madhya Pradesh	18966245	17973246	-992999	-5.5	6.71
Maharashtra	17493526	19241558	1748032	9.1	6.19
Manipur	463955	591614	127659	21.6	0.16
Meghalaya	613348	692968	79620	11.5	0.22
Mizoram	80500	83394	2894	3.5	0.03
Nagaland	344997	568035	223038	39.3	0.12
Odisha	9958429	11608795	1650366	14.2	3.52
Puducherry	157786	160819	3033	1.9	0.06
Punjab	5959982	6430200	470218	7.3	2.11
Rajasthan	19623651	18154176	-1469475	-8.1	6.94
Sikkim	101514	144321	42807	29.7	0.04
Tamil Nadu	12885691	14645974	1760283	12.0	4.56
Tripura	411120	740658	329538	44.5	0.15
Uttar Pradesh	54623455	58854009	4230554	7.2	19.33
Uttarakhand	1849525	2023535	174010	8.6	0.65
West Bengal	19156368	21565574	2409206	11.2	6.78
India	**282592906**	**304146862**	**21553956**	**7.1**	**100.00**

Table – 6 Details of male Illiteracy across States and India

STATE/UT	Number of male illiterates		Decadal decrease in the total No. of male illiterates	% Change	State wise contribution to decrease (in %)
	2011	2001			
Andaman and Nicobar Islands	17724	23256	5532	23.79	0.07
Andhra Pradesh	9475953	9895304	419351	4.24	5.28
Arunachal Pradesh	166420	171827	5407	3.15	0.07
Assam	3007319	3299224	291905	8.85	3.68
Bihar	12782895	13946714	1163819	8.34	14.66
Chandigarh	51781	61588	9807	15.92	0.12
Chhattisgarh	2165067	1962410	-202657	-10.33	-2.55
Dadra and Nagar Haveli	24808	29209	4401	15.07	0.06
Daman and Diu	11514	10835	-679	-6.27	-0.01

Delhi	717030	826769	109739	13.27	1.38
Goa	48857	70878	22021	31.07	0.28
Gujarat	3901003	4552156	651153	14.30	8.20
Haryana	1857558	2050089	192531	9.39	2.43
Himachal Pradesh	321824	391128	69304	17.72	0.87
Jammu and Kashmir	1291636	1534904	243268	15.85	3.06
Jharkhand	3280649	3716144	435495	11.72	5.49
Karnataka	4782895	5546749	763854	13.77	9.62
Kerala	554265	779985	225720	28.94	2.84
Lakshadweep	1303	1979	676	34.16	0.01
Madhya Pradesh	6801806	6191531	-610275	-9.86	-7.69
Maharashtra	5950081	6069201	119120	1.96	1.50
Manipur	155456	203634	48178	23.66	0.61
Meghalaya	289307	324600	35293	10.87	0.44
Mizoram	31249	35828	4579	12.78	0.06
Nagaland	150907	259416	108509	41.83	1.37
Odisha	3405958	3923685	517727	13.19	6.52
Puducherry	47606	48638	1032	2.12	0.01
Punjab	2537415	2778951	241536	8.69	3.04
Rajasthan	6223409	5793238	-430171	-7.43	-5.42
Sikkim	39040	59582	20542	34.48	0.26
Tamil Nadu	4277208	4865631	588423	12.09	7.41
Tripura	138999	269516	130517	48.43	1.64
Uttar Pradesh	20059965	22154923	2094958	9.46	26.39
Uttarakhand	556866	604100	47234	7.82	0.60
West Bengal	7579821	8189379	609558	7.44	7.68
India	**102705594**	**110643001**	**7937407**	**7.17**	**100.00**

Table – 7 Details of male Illiteracy across States and India

STATE/UT	Number of female illiterates		Decadal decrease in the total No. of female illiterates	% Change	State wise contribution to decrease (in %)
	2001	**2011**			
Andaman and Nicobar Islands	34980	27698	7282	20.82	0.02
Andhra Pradesh	16208523	15405262	803261	4.96	8.56
Arunachal Pradesh	235485	239114	-3629	-1.54	0.13
Assam	4842875	4382150	460725	9.51	2.44
Bihar	21136155	19678040	1458115	6.90	10.94

Chandigarh	80189	78797	1392	1.74	0.04
Chhattisgarh	4143328	4338520	-195192	-4.71	2.41
Dadra and Nagar Haveli	47178	44776	2402	5.09	0.02
Daman and Diu	19191	16393	2798	14.58	0.01
Delhi	1342125	1320690	21435	1.60	0.73
Goa	145260	99590	45670	31.44	0.06
Gujarat	8758707	7668069	1090638	12.45	4.26
Haryana	3665261	3514195	151066	4.12	1.95
Himachal Pradesh	852014	725144	126870	14.89	0.40
Jammu and Kashmir	2315707	2163528	152179	6.57	1.20
Jharkhand	6495657	5989921	505736	7.79	3.33
Karnataka	9686751	8504047	1182704	12.21	4.73
Kerala	1782555	1243017	539538	30.27	0.69
Lakshadweep	4897	3362	1535	31.35	0.00
Madhya Pradesh	11781715	12164439	-382724	-3.25	6.76
Maharashtra	13172357	11543445	1628912	12.37	6.42
Manipur	387980	308499	79481	20.49	0.17
Meghalaya	368368	324041	44327	12.03	0.18
Mizoram	47566	49251	-1685	-3.54	0.03
Nagaland	308619	194090	114529	37.11	0.11
Odisha	7685110	6552471	1132639	14.74	3.64
Puducherry	112181	110180	2001	1.78	0.06
Punjab	3651249	3422567	228682	6.26	1.90
Rajasthan	12360938	13400242	-1039304	-8.41	7.45
Sikkim	84739	62474	22265	26.27	0.03
Tamil Nadu	9780343	8608483	1171860	11.98	4.79
Tripura	471142	272121	199021	42.24	0.15
Uttar Pradesh	36699086	34563490	2135596	5.82	19.21
Uttarakhand	1419435	1292659	126776	8.93	0.72
West Bengal	13376195	11576547	1799648	13.45	6.44
India	**193503861**	**179887312**	13616549	7.04	100.00

Gender Gap in the Literacy Rates

In India, male literacy is higher than female literacy. Historically, a variety of factors have contributed to the for low female literacy rates, viz Gender based inequality, social discrimination and economic exploitation occupation of girl child in domestic chores and low enrolment of girls in schools.

Table - 8
Gender Parity Index (GPI) of Literacy across states

States	2001	2011
Jammu & Kashmir	0.65	0.74
Himachal Pradesh	0.79	0.84
Punjab	0.84	0.88
Chandigarh	0.89	0.90
Uttarakhand	0.72	0.80
Haryana	0.71	0.78
Delhi	0.86	0.89
Rajasthan	0.58	0.66
Uttar Pradesh	0.61	0.74
Bihar	0.55	0.72
Sikkim	0.79	0.87
Arunachal Pradesh	0.68	0.80
Nagaland	0.86	0.92
Manipur	0.76	0.84
Mizoram	0.96	0.96
Tripura	0.80	0.90
Meghalaya	0.91	0.96
Assam	0.77	0.85
West Bengal	0.77	0.86
Jharkhand	0.58	0.72
Odisha	0.67	0.78
Chhattisgarh	0.67	0.75
Madhya Pradesh	0.66	0.75
Gujarat	0.73	0.81
Daman & Diu	0.76	0.87
Dadra & Nagar Haveli	0.57	0.76
Maharashtra	0.78	0.86
Andhra Pradesh	0.72	0.79
Karnataka	0.75	0.83
Goa	0.85	0.91
Lakshadweep	0.87	0.92
Kerala	0.93	0.96
Tamil Nadu	0.78	0.85
Puducherry	0.83	0.88
Andaman & Nicobar Island	0.87	0.91
India	**0.71**	**0.80**

In order to minimize the inequality between the two sexes, it is necessary to minimize the difference between male and female literacy rates. The difference in male and female literacy rates in India in 2011 is 16.3 percentage points as compared to 21.6 percentage points in 2001. The difference between the two sexes has come down over the decade by 5 percentage points. In 2001 the gender disparity index *("GPI")* of literacy rate was 0.59 or less in 4 states, while the same was equal to or less than 0.69 in respect of 10 states i.e., Jammu & Kashmir, Rajasthan , Uttar Pradesh, Bihar, Arunachal Pradesh, Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh, Dadra & Nagar Haveli.

Table - 9
Relative position of major states in terms of gender disparity in literacy rates (2001 and 2011)

States	Rank*(GPI **) 2001	Rank*(GPI **) 2011
Bihar	1	3
Jharkhand	2	2
Rajasthan	3	1
Uttar Pradesh	4	5
Jammu & Kashmir	5	4
Madhya Pradesh	6	7
Odisha	7	9
Chhattisgarh	8	6
Arunachal Pradesh	9	11
Haryana	10	8
Uttarakhand	11	12
Andhra Pradesh	12	10
Gujarat	13	13
Karnataka	14	14
Manipur	15	15
Assam	16	18
West Bengal	17	20
Maharashtra	18	19
Tamil Nadu	19	16
Himachal Pradesh	20	17

** Higher the rank, wider is the gender disparity in the literacy rates in the states, i.e; smaller the size of GPI in literacy. A state with 'Rank 1' accounts for the highest gender disparity and a state with 'Rank 20' for the lowest gender disparity in literacy. The rank is not based on all states and UTs. The basic purpose is to show the progress of major states in bridging the gender gap during 2001-2011.*

*** GPI of literacy=Female Literacy Rate/Male Literacy Rate*

In 2011, the GPI of literacy was more than .70 in respect all the states and union territories (*excepting Rajasthan*). In 2001, the gender gap in literacy which was highest in Bihar, improved its position to the third in 2011. Rajasthan which had occupied third position in 2001 in terms of GPI in literacy, moved to first position by 2011, further widening the gender disparity. The performance of states like Uttar Pradesh, Odisha and Arunachal Pradesh has been very encouraging in terms of reducing the gender gap in literacy. Overall the gender gap in literacy rate has substantially narrowed down across most of the Indian States over the last decade, which is certainly a significant achievement.

State-wise changes in Literacy and Illiteracy Rates during 2001-2011

The literacy level in India has increased by over 8 percentage points between 2001-2011. The rise seen in male and female literacy rates over the period, 2001-2011, amounts to the extent of nearly 6 and 11 percentage points respectively. Thus, the growth in literacy levels has nearly doubled in respect of females as compared to males. Therefore, the gender gap has got restricted to 16 percentage points as compared to 22 percentage points in 2001.

Table – 10
Percentage changes in illiteracy –literacy ratios (2001-2011)

States	Total Percentage			Male Percentage			Female Percentage		
	2001	2011	Change 01-11	2001	2011	Change 01-11	2001	2011	Change 01-11
Kerala	10	6	36	6	4	32	14	9	38
Tamil Nadu	36	24	32	21	15	29	55	35	36
Andhra Pradesh	65	47	28	42	32	23	98	67	31
Karnataka	50	32	36	31	21	34	76	47	38
Assam	58	37	37	40	27	33	83	49	41
Himachal Pradesh	31	19	37	17	10	41	48	31	37
Punjab	44	30	30	33	23	31	58	40	31
Gujarat	45	26	42	26	15	43	73	41	43
West Bengal	46	30	35	30	21	30	68	41	40
Maharashtra	30	21	31	16	11	31	49	32	34
Bihar	113	57	50	68	36	46	202	88	57
Chhattisgarh	55	41	25	29	23	22	93	65	30
Jharkhand	87	48	45	49	27	43	157	78	50
Madhya Pradesh	57	42	27	31	24	23	99	67	33
Odisha	59	36	38	33	21	35	98	55	43
Rajasthan	66	49	25	32	24	25	128	90	30
Uttar Pradesh	78	43	44	45	26	42	137	69	50
Uttarakhand	40	26	35	20	13	34	68	41	39

** Number of illiterates divided by number of literates X 100*

Pertaining to illiteracy across states, Kerala accounts for just 6 percent of illiterates in 2011. To state otherwise, the number of illiterates per 100 literates in the state is 6. While in Bihar it is 57 illiterates for every 100 literates, the highest across states in India. Gender wise, Kerala accounts for only 4 male illiterates per 100 literate while 9 female illiterates per 100 literates. In respect of Bihar it is 36 and 88 illiterates for 100 literates for males and females respectively. The ratio of illiterates to literates in the country has changed significantly over the decade 2001-2011. For instance, Bihar has witnessed a significant change in respect to all categories over the decade 2001-2011 (*Total 50%, Males 46%, Females 57%);* more than 40% change in respect of Jharkhand and Uttar Pradesh; for males more than 35% change in respect of Gujarat, Jharkhand, Uttar Pradesh and Himachal Pradesh and for females

more than 40% change in respect Odisha, Jharkhand, UttarPradesh, Assam and Gujarat. EAG States like Bihar, UP and Jharkhand have witnessed substantial changes in illiteracy –literacy ratios over the decade 2001-2011.The standard deviation of the number of illiterates among the literates in the States/UTs works out to 9.66 in respect of males and 21.32 in respect of females. What it indicates is that States and UTs have experienced considerable variations in terms of the number of illiterates to literates, especially with regard to the females.

Population and Literacy: A State-Wise Comparison

The ratio of literates to the total population of each state, expressed as a percentage, gives an idea about the contribution of states to the literate population of the country as compared to their contribution of 100 persons to the total population For instance, among the states, Uttar Pradesh continues to account for the largest share of India's population i.e., 16.5 percent of India's total population resides in Uttar Pradesh followed by Maharashtra and Bihar with 9.3 and 8.6 percent respectively.

Table - 11
Share of Population and Literates (States) and their ratios

States	Percentage Share of India's		
	Tot Pop (T)	Literates (L)	L/T
Bihar	8.5	7.0	81
Chhattisgarh	2.1	2.0	95
Jharkhand	2.7	2.4	88
Madhya Pradesh	6.0	5.6	94
Odisha	3.5	3.5	100
Rajasthan	5.7	5.0	88
Uttar Pradesh	16.5	15.0	92
Uttarakhand	0.8	0.9	108
Andhra Pradesh	7.0	6.6	94
Assam	2.6	2.5	96
Gujarat	5.0	5.4	108
Himachal Pradesh	0.6	0.7	100
Kerala	2.8	3.7	129
Maharashtra	9.3	10.7	114
Punjab	2.3	2.5	104
Tamil Nadu	6.0	6.8	112
West Bengal	7.5	8.1	107

It can be seen from the table 11 that the states with high literacy rates contribute more to the literate population than to the total population of the country. For example, the state of Kerala, with the highest literacy rate among all the states and Union territories in the country, accounts for the lowest percent of India's total population

even as it contributes 3.6 percent of the country's literates. Thus when given State makes a contribution of 100 persons to the country's population, it means a contribution 129 literates to the country. Similarly, Maharashtra contributes 114 literates to the total population when it contributes 100 persons to the population of the country. Likewise, Tamil Nadu, Gujarat, Uttarakhand and West Bengal are the other major states that contribute more number of literates as compared to their contribution to the population of the country. Bihar contributes 81 literates to the literate population when it contributes 100 persons to the total population. The other major states under this category making relatively smaller contributions to the literate population when compared to their contribution to the population of the country, are Jharkhand, Rajasthan, Andhra Pradesh, Madhya Pradesh, Uttar Pradesh, Assam and Chhattisgarh. For Odisha and Himachal Pradesh the ratio with a value of 100 shows that their contributions to the total population and literates are identical.

Table – 12
Share of Male and Male Literates (States) and their ratios

States	Percentage Share of India's		
	Male Pop (T)	Literates (L)	L/T
Bihar	8.7	7.2	85
Chhattisgarh	2.1	2.0	95
Jharkhand	2.7	2.5	93
Madhya Pradesh	6.0	5.8	97
Odisha	3.4	3.5	103
Rajasthan	5.7	5.4	95
Uttar Pradesh	16.8	15.7	95
Uttarakhand	0.8	0.9	113
Andhra Pradesh	6.8	6.5	96
Assam	2.6	2.4	92
Gujarat	5.0	5.4	108
Himachal Pradesh	0.6	0.6	100
Kerala	2.6	3.1	119
Maharasthra	9.4	10.4	111
Punjab	2.3	2.4	104
Tamil Nadu	5.8	6.4	110
West Bengal	7.5	7.8	104

Kerala contributes the highest number of male literates for 100 males contributed to the population of the country i.e., 119 compared to 113 by Uttarkhand and 111 by Maharashtra. Among the southern states, Andhra Pradesh has made a relatively less contribution to male literates as compared to their contribution to the total male population. EAG states like Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh and Assam have made a lesser contribution to male literates when compared to their contribution to male population. Of these Bihar has contributed

85 male literates, as compared to their contribution of 100 to India's population. Assam with a contribution of 92 male literates and Jharkhand with 93 male literates come in the next two positions.

Table-13
Share of Female and Female Literates (States) and their ratios

States	Percentage Share of India's		
	Female Pop (T)	Literates (L)	L/T
Bihar	8.5	6.4	76
Chhattisgarh	2.2	2.0	91
Jharkhand	2.7	2.3	85
Madhya Pradesh	6.0	5.4	90
Odisha	3.5	3.5	100
Rajasthan	5.6	4.4	79
Uttar Pradesh	16.2	14.0	88
Uttarakhand	0.8	0.9	113
Andhra Pradesh	7.2	6.8	94
Assam	2.6	2.6	100
Gujarat	4.9	5.4	110
Himachal Pradesh	0.6	0.7	117
Kerala	3.0	4.3	143
Maharashtra	9.2	11.0	117
Punjab	2.2	2.4	109
Tamil Nadu	6.1	7.2	118
West Bengal	7.6	8.4	111

While Kerala has contributed 143 female literates as compared to 100 females to India's female population, its neighboring state Tamil Nadu has come up with only 118 female literates for every 100 females contributed to the female population of the country. Excepting Uttarakhand and Odisha, all other EAG states have accounted for a lesser contribution of female literates in relation to their contribution to the female population of the country, while Bihar with a contribution of only 76 female literates for every 100 females contributed to India's population.

Conclusion

The last decade has shown enormous improvement in the literacy scenario of the country (*particularly female literacy)* as reflected by high average literacy rates. The increase in the female literacy rates has doubled in relation to the increase in the literacy rates of males over the last decade. And the improvement in the literacy rates in respect of rural areas is two times their counterparts in the urban areas and also there is a higher improvement in female literacy in respect of both the urban and rural areas than male literacy levels.

But Illiteracy still remains to be wiped out in every state with the burden in terms of numbers being borne by a few states, such as UP, Bihar, AP, Rajasthan, West Bengal, Madhya Pradesh and Maharashtra. Not surprisingly, female illiteracy is also very high in these states. But when closely analyzed, these states have achieved a fairly encouraging reduction in the number of illiterates, especially female illiterates over the last decade as compared to earlier decades.

Analysis shows that gender disparity is high in respect of Rajasthan, Jharkhand, Bihar, Jammu & Kashmir and Chhattisgarh. Further, over the last decade, the performance of backward states when it comes to reducing the gender gap in literacy.

A greater improvement can also be observed in the literacy levels at the district level. Only 15 districts have literacy rates less than 50%. Pertaining to the issue of illiteracy across states, Kerala accounts for just 10 illiterate per 100 literates, whereas for Bihar it is 57 illiterates for every 100 literates, which is the highest across states in India. All EAG states, Assam, Andhra Pradesh and Himachal Pradesh made relatively lower contributions to the literate population relative to their contribution to the population of the country. Therefore this study concludes that significant steps should be taken to make a faster advancement in reducing illiteracy levels in the country.

Reference

Final Population Data: India, Census of India 2011, Census of India website

Career Interest among Government and Private School Adolescents

Gopal Chandra Mahakud

According to qualitative analysts the psychological attributes of no two persons are equivalent in nature and hence, it can be said that the interest to do certain work is also different from person to person. Hence, the career interest of children studying in government and private schools is definitely an interesting field of research as these two groups are heterogeneous in different aspects starting from environmental, psycho-social, psychological and their socio-economic status (Borchert, 2002, Coleman, Hoffer & Kilgore, 1982). The study of Humlum, Kleinjans and Neilsen (2007) asserted that high socio-economic status of school students positively influence for a better career choice compared to a low socio-economic group (Thout, 1969). Therefore it can be stated that individual difference is a key factor for interest to do any task. In this context, Rosenstock and Steinberg, (1996) and Borchert, (2002) affirmed the determination of career choices among adolescents are perceived from their environment, personality and job opportunities. People with keen interest and great enthusiasm always perform better in their work place as compared to the people without interest and/or of low enthusiasm. From numerous studies on career development it is confirmed that no single attribute can guide a person for better career choices. According to the views of Mahakud (2013) the measurement of intelligence; aptitude, personality and interest are most emergent aspects for a better career guidance. Further from the study of Mahakud (2013) conducted with (N=40) college adolescents in Delhi city using Differential Aptitude Test (DAT) and Raven's Standard Progressive Matrices (SPM), it has been found that along with the assessment of aptitude, it is also necessary to assess the IQ level of the aspirants for any career selection and guidance.

In the underdeveloped countries and even developing countries career choices is a great concern. Choices of career in these countries face number of problems and/or a least choice usually given to the adolescents for the selection of their own career focusing to their interests. In this context it can be said that forceful interest towards any study or job selection definitely weaken their motivation level, energy level and indirectly slow down the

development of the country. Borchert, (2002) stated that it is very sad to say that in most of the countries parental, peer and other social pressures are common not only for selection of study in school level but also for higher education and job selection. Due to these factors some of the career choices are immature in nature. Adolescents select their career without thinking about their own abilities and do only due to the pressure from various social agents. In this context the statement of Borchert (2002) looking more valid that the personal values and desires have seldom been realized without the active and conscious efforts on the part of adolescents, therefore, most of the career choices could not be successful. In this regard the researcher suggested that the students must be motivated to orchestrate the outcome. If the students want to work in the career choice process they must know and understand the realities of that process.

If career planning is done in an efficient manner, students may at the very least be following a career plan of informed decision-making, rather than one of happenstance. Better career selection can be positively correlated with high success in their respective careers. The most important limitation in developing and underdeveloped countries is that till date the choice of career is traditional in nature. Therefore there are only a few studies focusing for a better career choice following the standard procedures such as various psychological measures (e.g. Aptitude, interest, personality and intelligence) especially in India. The discrimination of various factors between the government and private schools in metro cities is clearly visible. Therefore, it can be stated that the difference in students of their choices on food, shelter, costumes and the most important part of their life, i.e. career choice is also observable.

Keeping the above said issues in mind the researcher planned and conducted the present study to find out the career choice of the students studying in government and private schools in Delhi city for which the following methodology was adopted:

Objective

The study was planned to compare the career interest of government and private school adolescent students in Delhi city.

Materials

To exclude the adolescents specifically mentally retarded, the researcher

used Raven's Standard Progressive Matrices (SPM, Raven, 1998). It is difficult to locate adolescents with mental retardation in most of the private schools, but somehow it is possible to locate such students in government schools. It is to state here that in metro cities like Delhi mentally retarded children normally take admission in special schools. Then after getting a desired group of adolescents the researcher used Career Interest Inventory (Jovanovich, 1996) to satisfy the main objective of the study. Other materials such as Pencil, Laptop etc. were used according to the requirement of the study.

Sample

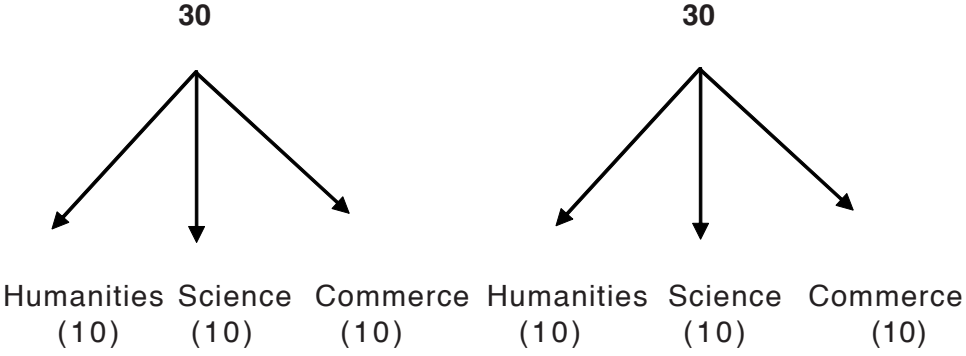
A total of 60 adolescent students were taken as sample for the study from 4 schools – 30 students from two government schools and another 30 from two private schools. The adolescent students chosen were from class XI and XII purposely 5 each from the stream of Science, Commerce and Humanities.

(n 30 from government schools + n 30 from private schools = N 60)

Design

The study followed single case research design by collecting the information from individual students in their leisure time. The selection of sample followed the following design of research depicted in the following Flow Chart. Five students from each stream (3 x 5 x 2 schools = 30). The design was maintained same for both government and private schools.

Flow Chart



Procedure

After fulfilling the ethical formality of getting permission from the school authorities and the consent from the students for the study with the help of class teachers the researcher interacted with the participants in a friendly manner. It was not so difficult to the researcher because nearly the participants were similar age ranged with two of the persons helped the researcher. Then the researcher informed the students about the objective of the study and assured them that all the information collected will be kept confidential and will be strictly used for the research purpose only. The study initially followed IQ test and after accessing and categorising different IQ level the researcher collected the information related to career interest using the Career Interest Inventory.

The instructions for both SPM test and Career Interest Inventory were clearly detailed by the researcher before collection of data following respective test of concern. As the participants were skilled to read and understand the questionnaires the researcher only helped them to fill-up the questionnaire whenever and wherever they were confused. Besides the instructions during the collection of data the researcher also gave importance to some psychological intervening variables such as feeling fatigue, tiredness, boredom etc.

All the information collected from the participants were analyzed following the respective manuals and statistically analysed using different descriptive and inferential statistics such as graphical and students' t–test. The scores in different subtest of Career Interest Inventory (Harcourt Assessment, 1996) were analysed using 't' matrices to compare the government and private school children's career interest in different field of work.

Result and Discussion

The Table-1 shows the comparison of career interest by government and private school students according to the IQ score.

Note: SS- Social Sciences, CS- Clerical Services, HS-Health services, Agri-Agriculture, Cu.Se- Customer Services, FA- Fine Arts, MS- Math and Science, BT-Building Trades, ES- Educational services, LS-Legal services, Trans. Transport Services, Sales-Sales, Manag-Management, CW-Craftwork, MO-Machine Operation
.

Table - 1
Comparison of Career Interest According to IQ Score of Government and Private School Students

Categories		SS	CS	HS	Agri.	Cu Se.	FA	MS	BT	ES	LS	Trans.	Sales	Manag.	CW	MO
Government students	90-110	31.33	33.72	34.39	32.44	30.17	33.44	34.39	29.44	31.94	32.22	33.06	29.00	30.72	34.17	32.78
	110-130	25.82	29.18	30.36	30.00	29.55	30.36	34.36	43.27	35.91	26.91	29.55	25.55	27.09	31.36	30.18
Private students	90-110	35.50	28.50	32.71	26.29	25.21	32.21	29.14	26.71	34.79	32.36	24.57	28.14	31.79	23.93	24.64
	110-130	35.27	30.80	35.53	28.53	30.27	35.73	35.27	24.87	34.27	34.07	26.20	27.33	33.53	24.27	23.93

The intelligence group of government and private school students were classified into two groups according to their IQ level such 90-110 and 111-130. The results following IQ in relation to career interest of both government and private school students revealed that the students with high IQ level 111-130 from government schools preferred Educational services (mean average score-43.27) and legal services (mean average score 35.91), compared to their counterpart of low IQ score (IQ=90-110), i.e. those scored a mean average score of 29.44 and 31.94 in educational services and legal services respectively (Result Table -1). In this context Zirkel, Richardson, & Gold, (2001) study also confirmed the same. In a study Greenbank, (2007) argued that students from poor socio-economic background may be less intelligent than higher SES classes which lead them poor educational achievement. In the later stage students from poor socio-economic background tend to possess short-term goals and lack ambition.

The Table – 2 given below reflects the comparison of career choices among government and private school students

Table-2
Comparison of Career Choices among Government and Private School Students

Careers	Categories	Mean	SD	df	P=value
Social Sciences	Government school	29.37	8.69	58	0.005* 0.005**
	Private school	35.30	8.30		
Clerical Services	Government school	32.00	6.20	58	0.197* 0.197**
	Private school	30.03	5.46		
Health Services	Government school	32.80	6.65	58	0.407* 0.407**
	Private school	34.33	7.55		
Agriculture	Government school	31.50	6.04	58	0.035* 0.035**
	Private school	27.87	6.93		
Customer Services	Government school	30.00	6.52	58	0.306* 0.306**
	Private school	28.10	7.68		
Fine Arts	Government school	32.20	6.28	58	0.175* 0.175**
	Private school	34.50	6.68		
Mathematics and Sciences	Government school	34.20	7.18	58	0.405* 0.405**
	Private school	32.60	7.59		
Building Trades	Government school	34.37	35.71	58	0.188* 0.188**
	Private school	25.53	6.69		
Educational Services	Government school	33.17	6.99	58	0.299* 0.299**
	Private school	34.87	5.48		
Legal Services	Government school	30.17	6.05	58	0.085* 0.085**
	Private school	33.60	8.89		
Transport	Government school	31.77	7.71	58	0.002* 0.002**
	Private school	25.57	7.31		
Sales	Government school	27.87	5.81	58	0.953* 0.953**
	Private school	27.97	7.19		
Management	Government school	29.47	6.90	58	0.059* 0.059**
	Private school	33.17	7.94		
Craft Work	Government school	33.20	6.24	58	0.000* 0.000**
	Private school	24.97	7.76		
Machine Operation	Government school	31.87	6.07	58	0.000* 0.000**
	Private school	24.23	6.76		

P= Value: *0.05% level of confidential, **0.01 level of confidential

Socio-economic status, school environment, school culture etc. are some of the important factors which determine the career choice among school children. The result of the present study based on career choice among government and private school children are definitely different. It revealed that there is a significant difference of career choice in the field of social sciences (government school Mean=29.37, SD= 8.69, private school Mean= 35.30, SD=8.30) at P=0.005).

This result indicates that private school students are more interested for career in social sciences in comparison to government school students. It may be due to the students in government schools come from the families belong to poor socio-economic status in comparison to the private school students. In this regard Lent, (2001) and Herr, Cramer and Niles (2004) stated that career choices among adolescents are mostly influenced by the socio-economic status of their families. The researcher also argued that better socio-economic status of the people can help them to gather information better about the work, work experience and occupational stereotypes, which, in turn, affect their vocational interests (p. 198). In a recent study by Metheny & McWhirter (2013) stated that some of the variables such as family socio-economic status, family support, and parental career also influence the preference of career among the adolescents.

Similarly in the field of agriculture, the mean score of government school students was 31.50 and SD=6.04 and of private school students was 27.87 and SD=6.93 at P=0.035. The difference states that government school children have comparatively shown more interest in agriculture as a career than the private school students. In the field of Transport, the mean score of government school students was 31.77 and SD=7.71 and of private schools was 25.57 and SD=7.31 at P=0.002. The result indicates that government school children are more interested in the field of transport compared to private school children. In this regard Milne & Plourde (2006) stated that the poor socio-economic status is an important cause of low cognitive development among children with poor SES and further it leads to low academic performance in the class and also leads them to choose jobs with low salary as a career in future. Due to the declination of interest in the field of agriculture and lack of opportunities in cities, it is found that students did not choose agriculture as a career (Esters & Bowen (2005). In this regard the other career interest also depends on their socio-economic status - poor socio-economic status people choose jobs with low salary like driving, carpentry, stitching, etc. while the high socio-economic status people choose some better jobs like social sciences, engineering, health care, etc.

In the recent time management courses have taken an important place in the developing country like India. In the field of management as a career option, government school students' mean score was 29.47, SD=6.90, whereas private school students' mean score was 33.17, SD=7.94 at P=0.059. The result indicates that private school children prefer management

as a career comparatively better than the government school students. In the field of craft work government school students' mean score was 33.20, SD=6.24 whereas private school students mean score was 24.97, SD=7.76 at P=0.000. This finding indicates that private school students are less interested in craft work as a career than that of the government school children. Further it was found that the mean score of government school students in the field of machine operation was 31.87, SD 6.07 while the mean score of private school students was 24.23, SD=6.76 at P=0.000. This indicates high preference of machine operation by government school students compared to their counterparts in private schools. It can be said that students from low socio-economic status (especially studying in government aided schools) prefer jobs with low salary compared to the students belong to high socio-economic status. In this context Arulmani and Arulmani (2004) stated that preference of low salary jobs by lower socio-economic group students may be due to their feeling of less control over their lives and see less value in sacrificing for long term goals. They were less interested in career planning or further education and were more likely to plan to enter the workforce directly due to poverty and immediate financial requirements of their families.

The results of the study in other fields of career choices such as clerical services, health services, customer services, fine arts, mathematics and sciences, building trades, educational services, legal services, and sales found no such significant differences between the government school students and private school students. In their study, O'brien, Martinez-pons and Kopala (1999) affirmed that career interest in mathematics is mostly influenced by some of the important factors such as ethnic identity, academic achievement, and socio-economic status of the aspirants. In some other studies, other factors such as gender (Houser & Yoder, 1992; Jones & Larke, 2001) parental occupation (Stone & Wang, 1990), parent's educational qualification (Conroy, Scanlon, & Kelsey, 1998; Jones & Larke, 2003), Parental influence (Findlay & Rawls, 1984; Kotrlik & Harrison, 1987, 1989; Fisher & Griggs, 1995), and self-esteem (Wilson & Fasko, 1992; Hughes, Martinek, & Fitzgerald, 1985) are also responsible to choose mathematics as a career. The cause might be that, some of the careers like legal services, educational services, building trades and health services are equally demanding among the low and high economic status people especially in metro cities. For these services it needs more skill and aptitude than to financial factors. In a study by Morgan, Isaac, & Sansone (2001) found that 79% white students, 12% Latino, 5% Asian, 4% others from the

middle class socio-economic status preferred physical/mathematical science careers.

Conclusion

Choosing a right career for future is very important for life. In this regard the scientific process of career choice also guides the individuals to choose the career on their own interest but not with the external factors. Therefore the assessment of intelligence and interest for career counselling play a vital role. The present study stated that socio-economic status is an important determination for interest in career. The area of concern is that students form low socio-economic status normally study in government/government aided schools while students from high socio-economic status prefer to study in private schools spending a lot of money. On the basis of their school culture and economic status there is a variation in their career interest. The study indicates that generally students from government schools prefer low salary jobs whereas the private school students prefer high salary jobs. The study also reveals that students having high IQ score prefer better salaried jobs compared to the students having low IQ level in both government and private schools. Hence, from this study it can be concluded that IQ and socio-economic status are the important factors influence students for future career choices.

Limitation of the study

The most important limitation of the study was that of low sample group, i.e. a total of 60 students out of which 30 from government schools and another 30 from private schools, that too only in Delhi metropolitan city. Another limitation of the study is that it only included two parameters of career choices i.e. IQ and Interest whereas personality and aptitude test could have been included. Due to the time constraint and other factors the study was limited with two parameters only. Further a study including all the parameters of career assessment i.e. Intelligence, personality, aptitude, and Interest on a large sample in both rural and urban set-up can provide better dimension for career guidance and counselling.

References

Arulmani, G., & S. Arulmani, S (2004). *Career counselling: A handbook,* Tata McGraw-Hill, New Delhi, 2004, p. 79.

Borchert, M. (2002). Unpublished thesis presented to The Graduate College, University of Wisconsin-Stout, for the partial fulfilment of M.Sc. in career and Technical Education.

Burke, H.R. 1972. Raven's progressive Matrices: validity, Reliability and Norms. *The Journal of Psychology*, 82: 253-257.

Coleman, J. S., Hoffer, T., & Kilgore, S. (1982). *High school achievement.* New York: Basic Books.

Esters, L.T., & Bowen, B. E. (2005), Factors Influencing Career Choice of urban agricultural education Students. *Journal of Agricultural Education*, 46 (2): 24-35.

Greenbank, P. (2007). Higher education and the graduate labour market: The 'class factor'. *Tertiary Education and Management*, 13(4): 365-376.

Herr, E. L., Cramer, S. H., & Niles, S. G. (2004). *Career guidance and counselling through the lifespan: Systematic approaches* (6th ed.). Chicago, IL: Pearson Education, Inc.

Jovanovich, H. B. (1996). *Career Interest Inventory.* Psychological Corporation

Lent, E. B. (2001). Welfare-to-work services: A person-centred perspective. *Career Development Quarterly,* 50 (1): 22-33.

Mahakud, G. C. (2013). Is it Important to Measure Intelligence along with Aptitude Test for Career Guidance. *International Journal of Arts, Science & Commerce,* Volume-4 (1), 92-102.

Metheny, J., & McWhirter, E. H. (2013). Contributions of Social Status and Family Support to College Students' Career Decision Self-Efficacy and Outcome Expectations, *Journal of Career Assessment*, 21 (3): 378-394

Milne, A., & Plourde, L. A. (2006). Factors of Low-SES Household: What Aids Academic Achievement? *Journal of Instructional Psychology*, 33 (3): 183-193

Morgan, C., Isaac, J. D., & Sansone, C. (2001). The Role of Interest in Understanding the Career Choices of Female and Male College Students. *Journal of Sex Roles*, 44 (5-6): 295-320

O'brien, V., Martinez-pons, M., & Kopala, M. (1999). Mathematics Self-Efficacy, Ethnic Identity, Gender, and Career Interests Related to Mathematics and Science. *The Journal of Educational Research,* 92 (4): 231-235

Raven, J., Raven, J. C., & Court, J. H. Raven's (1998). *Raven's Standard Progressive Matrices,* Oxford Psychologists Press Ltd.

Rosenstock, L. & A. Steinberg. (1995). Beyond the shop: Reinventing vocational education. In: M. W. Apple & J. A. Beane (Eds.) *Democractic Schools*. (pp.41-57). Alexandria VA: ASCD.

Thout, E. (1969). Preparation for government employment. Unpublished master's thesis, University of Wisconsin-Milwaukee.

Zirkel, P. A., Richardson, S. N. & Gold, S. S. (2001). *A digest of Supreme Court decision affecting education.* Phi Delta Kappa International, ISBN 0-87367-835-4.

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