

SNDT Women's University

Shreemati Nathibai Damodar Thackersey Women's University



AQAR 2020-21

Criterion I

Supporting documents

For

3.4.6- Number of books and chapters in edited volumes published per teacher during the last five years

SNDT WOMEN'S UNIVERSITY, MUMBAI

CRITERIA - III

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Name of the teacher	Title of the book/chapters published	Title of the paper	Year of publication	ISBN/ISSN number of the proceeding	Name of the publisher
Dr. Jaswandi Wamburkar (as Editor)	Book-Indian Modernity: Challenges and Responses: Professor Raja Dixit Felicitation Volume,	NA	2020	(ISBN No. 978-81-945328-1-1)	The Unique Foundation, Pune
Dr. Jaswandi Wamburkar	Indian Modernity: Challenges and Responses: Professor Raja Dixit Felicitation Volume,	‘Raja Dixit: An Eminent Professor’, pp. 9-26.	2020	(ISBN No. 978-81-945328-1-1)	The Unique Foundation, Pune
Dr. Jaswandi Wamburkar	Indian Modernity: Challenges and Responses: Professor Raja Dixit Felicitation Volume,	Editorial, pp.27-41	2020	(ISBN No. 978-81-945328-1-1)	The Unique Foundation, Pune
Dr. Jaswandi Wamburkar	Indian Modernity: Challenges and Responses: Professor Raja Dixit Felicitation Volume,	‘History, Gender and Vibhavari Shirurkar’s Writings’, pp. 320-338.	2020	(ISBN No. 978-81-945328-1-1)	The Unique Foundation, Pune
Dr. Madhavi Dharankar (Second author of the two)	Library, Information & Knowledge Services for Education 2020	Changing Peer Group Composition and Learning Outcomes: An Experimental Study (pp 127 - 138)	2020	978-93-89875-430	APH Publishing Corporation
Rupa Patel and Anita Chaware	‘Computer Vision and Recognition Systems Using Machine and Deep Learning Approaches: Fundamentals, technologies and applications	MobileNet Architecture and its Application to Computer Vision	2021	ISBN-13: 978-1-83953-323-5	The Institution of Engineering and Technology
Dr. Ruby Ojha and Ms. Ruchira Nair		Development Strategy for India Based on Comparative study of three Major Asian Economies	2020	9789389946437,	Gajanan Books
Dr Rajshree patil	Pariwrtanwadi sahitya: sanklpana aani swaroop	marathi vidnyankathetil parivartn	2021	978-81-949714-8-1	Swarup Prakashan

Dr. Sarika Sawant	Library, Information & Knowledge Services for Education 2020	Enhancing Visibility of Authors through Academic Social Platforms	2020	9789389875430	A.P.H. Pub Corporation
Dr. Parul Zaveri & Coauthor	Library, Information & Knowledge Services for Education 2020	Management of library records in the digital era	2020	9789389875430	A.P.H. Pub Corporation
Dr Jayashree Shinde	Faculty experiences of delivering blended Learning courses in Mishra S and Panda S (ed.) (Pg. 71-84)	Technology-Enabled Learning: Policies, Pedagogies, and Practices	2020	978-1-894975-98-8	Commonwealth of Learning, Vancouver, Canada
Bhan, Sujata & Coauthor	Accessibility: Barriers and Solutions, Renova International Publications		2020	978-93-90142-07-1	National Institute for Visually Handicapped
Bhan, Sujata	Family of A Child with Visual Impairment: Challenges and Coping Mechanisms	Visual Disability, A Resource Book for Teachers	2020	978-93-90142-07-1	National Institute for Visually Handicapped
Bhan, Sujata	Assessment of Children with Visual Impairment,	Visual Disability, A Resource Book for Teachers	2020	978-93-90142-07-1	National Institute for Visually Handicapped
Bhan, Sujata & Coauthor	Disability inclusive COVID-19 response: best practices	Disability inclusive response and recovery planning for COVID-19	2021	10059	UNESCO
Bhan, Sujata & Coauthor	Guidelines for e content for children with blindness and low vision	Guidelines for the Development of e-Content for Children with Disabilities	2021		NCERT

Indian Modernity: Challenges and Responses

Professor Raja Dixit Felicitation Volume



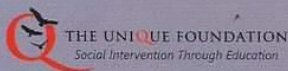
Editor

Dr. Jaswandi Wamburkar



Professor Shridhar Madhukar Dixit popularly addressed as **Raja Dixit** is an Emeritus Professor at the Department of History, Savitribai Phule Pune University, Pune. He is an esteemed member of the Indian Council of Historical Research (ICHR), New Delhi. He is also a member of the Board of Trustees of the Indian Institute of Education, Pune. He retired as the Professor and Head of the Interdisciplinary School (Humanities and Social Sciences) from Savitribai Phule Pune University in 2017. *Itihas, Samajvichar ani Keshavsut* (1993), *Pune Vidyapeethacha Itihas* (1999) and *Ekonisavya Shatakateel Maharashtra: Madhyamavargacha Uday* (2009) are his most acclaimed works. Among his six edited books, the much-admired are *Nivadak Shejwalkar* (2007), *Samagra Setumadhavrao Pagadi, Vol. II and III* (2010) and *Prarthana Samajacha Itihas* (2019). He has produced several History textbooks from K.G. to P.G. level which are extremely popular among students across Maharashtra. He has taught, lectured and published widely in India. He is known as a renowned historian, perceptive writer, excellent teacher, spellbinding orator, efficient administrator, marvellous poet and also, a soft-spoken, kind-hearted human being.

Modernity is a multi-dimensional movement and different cultures and nations demonstrate variants of modernity. India has progressed through a unique history vis-à-vis the Western world as the former experienced a complex phenomenon of renaissance, age of modernity and shift to capitalist mode – all almost in the same period under the shadow of colonial yoke. Modernity and its manifestation in various fields has remained a thrust area of research of Professor Raja Dixit and his close associates. And hence, all the articles contributed by eminent scholars in the present volume throw light either on personalities or different facets of human life that directly or indirectly contributed in the shaping of Indian Modernity. The volume explores the processes of introducing new education, science and history-writing; advent of new ways of transport and communication – railways, print culture, literature, theatre and film; the social and political reform movements and their philosophy. **Dr. Jaswanti Wamburkar** (Assistant Professor, Department of History, S.N.D.T. Women's University, Mumbai) is the editor of the volume.



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Raja Dixit: An Eminent Professor

Jaswandi Wamburkar

Professor Shridhar Madhukar Dixit, popularly addressed as Raja Dixit, is known in the academic circles as a public intellectual, brilliant historian and an illustrious professor. Recently he has been honoured with the designation of Emeritus Professor at the Department of History at Savitribai Phule Pune University (SPPU) since February 2020 and it is the crowning glory of his carrier. He is an esteemed member of the Indian Council of Historical Research (ICHR), New Delhi since December 2018. He is also a member of the Board of Trustees of the Indian Institute of Education, Pune.

Dr. Dixit retired as the Professor and Head of the Interdisciplinary School (Humanities and Social Sciences) from Savitribai Phule Pune University on 31st March 2017. At the time of retirement, he was also holding the additional charge as Co-ordinator of the Centre for Social Sciences and Humanities since July 2009. He was given the respectable position of the Director, Board of College and University Development (B.C.U.D.) of the University for a brief period before retirement as an additional charge.

We seldom come across scholars who are very painstaking

researchers, but they may not be necessarily good teachers or vice versa. A good researcher is in many cases a bad orator. Similarly, a good teacher, orator or researcher may not be unquestionably a good administrator. Nevertheless, Prof. Raja Dixit is an exception to this. He is known in the academic world as an erudite scholar, renowned historian, excellent teacher, mesmerizing orator, efficient administrator and also, a soft-spoken, kind-hearted human being.

Prof. Dixit has a very impressive, long Bio-data with many significant achievements in terms of awards, positions held, publications and his contribution in curriculum development. It is not possible here to give a detailed account of all his accomplishments. Instead, an attempt has been made in the following pages to give his brief life sketch and bring out his significant contributions to the field of academics and historical research.

Raja Dixit was born on 8th March 1955 and brought up in the city of Pune which is aptly given the sobriquet of 'Oxford of the East' by Jawaharlal Nehru once in his visit to Pune in 1950s. He had his schooling at Bhawe school, Bachelor's degree at S. P. College and all further education (Post-graduation, M.Phil. and Ph.D.) at the University of Pune. Subsequently for his entire career, he was in Pune barring the two years when he worked in Nashik in 1990-1992. Pune is steeped in academics and history and has a strong connect with theatre, literature and music. Brought up in the area of Sadashiv Peth of Pune, with many institutions and libraries around such as Maharashtra Sahitya Parishad, Bharat Itihas Sanshodhak Mandal, Bharat Natya Mandir, Tilak Smarak Mandir etc., the budding scholar received an intellectually stimulating environment for the overall growth of his personality.

Raja Dixit has mentioned his gratitude towards his parents for the role they both played in nurturing the young mind.¹ His father Madhukar Shridhar Dixit, popularly known as 'Ma. Shri.' in literary circles, was an activist in the domain of literature and culture, a biographer and historian. Though his father was a public figure, his mother Pratibha Dixit played a vital role in shaping his personality. Ma. Shri. was closely associated with Maharashtra Sahitya Parishad, Pune Nagar Vachan Mandir and several other institutions. Many eminent literary figures such

1 Personal interaction with Professor Raja Dixit on 12.01.2020 and his article - Raja Dixit, 'Ma. Shrinchi Payari', *Maharashtra Sahitya Patrika*, Pune, Issue no. 355, April-June 2016, pp. 35-36.

as Datto Waman Potdar, Vishram Bedekar, Shankarrao Kharat, Jayantrao Tilak, Shivajirao Bhosale, Ram Shevalkar, Suresh Bhat, R. C. Dhere and many other writers used to visit his home and the budding scholar used to witness the interactions among them since his childhood. He used to get ample books on varied themes including history and literature for reading and it gave boost to his love for history and literature.

The scholar, in his nascent age, was also benefited by the social milieu in the city through various activities such as annual Spring Lecture Series of the Vaktruttvottejak Sabha, Majestic Gappa, British Council Library, Ashay Film Club and many more. He was very active in the elocution competitions during his college days at S. P. College and had won several trophies of repute. He participated in many extracurricular activities of the college. All these factors helped in developing poetic fervours in him and soon he became popular as a poet in literary circles.

Pune in the seventies and eighties had become a centre of social and political movements wherein organizations such as Yukrand (Yuvak Kranti Dal) (1967), Muslim Satyashodhak Mandal (1969), Samata Prathishthan (1971) and Gramayan (1974) were at the forefront. It equally remained a nucleus of political leaders and intellectuals of great repute. Many journals like *Kirloskar*, *Stree*, *Manohar*, *Sobat*, *Manoos*, *Tatparya*, *Magova* and *Sadhana* had a deep impact on the intellectual life of the city. Raja Dixit started writing on various themes of history and literature in newspapers and journals and especially in the well-known weekly *Manoos*. Shri. Ga. Majgaonkar, the editor of the *Manoos* used to inspire young writers to contribute for his weekly. Raja Dixit contributed several articles in those years on various themes. He also wrote in other magazines like *Kirloskar* and his thought-provoking articles were received very well in the literary and academic circles. He, in the same period was invited to recite his poems on the platform of the esteemed Annual Marathi Sahitya Sammelan. He has about 100 poems to his credit published in renowned Marathi journals.

Raja Dixit was never associated with any political party or students' organization and yet, he protested against Emergency in 1975. He led Pune's first students' Satyagraha at S. P. College and as a result, suffered imprisonment at Yervada and Visapur jails respectively from 11th December 1975 to 24th January 1976. He worked for Gramayan, an organisation working for rural development for about three years which showed his inclination for social service. This gave him a good

experience of social work at grass root level.

Raja Dixit began his teaching career in July 1977 as Lecturer in History in Fergusson College Pune which he continued till November 1987. Later he worked at the Competitive Examinations Centre in the University of Pune (1987-1990), at Yashwantrao Chavan Maharashtra Open University, Nashik (1990-1992), at the Department of History, University of Pune (1992 to 2008) and also held the additional charge of Joint Director at the Competitive Examinations Centre (1996-2000). Successively he was also given the additional charge as Head of the Interdisciplinary School (I.D.S.) (Humanities and Social Sciences) (2006 to 2009). He joined on the permanent position of Professor and Head (I.D.S.) since December 2008 and retired in March 2017.

For a long time, historical research in Maharashtra remained confined to Maratha History. Nonetheless, researchers such as S. G. Malashe, G. B. Sardar, D. K. Bedekar, J. V. Naik, Eleanor Zelliot, Y. D. Phadke, Arvind Deshpande, Gail Omvedt were a new band of scholars who began to write history of Modern Maharashtra and especially the history of Maharashtra in the 19th Century. When Raja Dixit joined as a Lecturer in History, in the late seventies of the twentieth century, 19th Century Maharashtra had become an upcoming area of investigation in the universities in Maharashtra. Professor Arvind Deshpande was a pioneering figure from the Department of History at University of Pune who developed this area under his able guidance and leadership.

Raja Dixit, greatly influenced by Dr. Deshpande's brilliance and originality of thought soon made 19th Century Maharashtra as his area of research. Being an ardent lover of Marathi literature, Raja Dixit developed keen interest in analysing literature as a source to study history. He marked his debut as a researcher by securing his M.Phil. degree in History with a path-breaking work on 'Social Thought in the late 19th Century Maharashtra and poet Keshavsut' in 1989 for which he secured the Outstanding grade and he was the first student in History to receive it in the University of Pune. He has explored in this work in what way the progressive forces shaped modernity in India in the 19th century and the role of the modern Marathi literature in influencing modernity itself. He has ably used the 'sociology of literature' and illustrated in his research very brilliantly that the social thought reflected in the poetry of the celebrated Modern Marathi poet Keshavsut showed resonance with the yearnings of the newly emerging middle class in Maharashtra.

This being very unconventional and pioneering work which widened the horizons of history, renowned poet Narayan Surve readily published it on behalf of Lokvangmaya Gruha in 1993 in a book form with the title *Itihas, Samajvichar ani Keshavsut*.²

Raja Dixit in a short span of time became a close associate of Prof. Deshpande who truly became his friend, philosopher and guide. Needless to say, for his doctoral degree also, he worked under the able guidance of Prof. Deshpande and accomplished a very fascinating work on 'Maharashtra in the 19th Century: Rise of the Middle Class' in 1998. Many a times researchers produce their findings with plethora of historical facts but are devoid of any historical analysis. Researchers working on history of Maharashtra often neglect the regional sources. It has become quite fashionable among the academicians to use academic jargon which most of the people find difficult to comprehend. Dr. Dixit's work is free from all such lacunas. Based upon plenty of primary historical sources ranging from archival documents to Marathi literary sources, his is truly a very balanced and sound interpretation of the rise of middle class in Maharashtra. He has demonstrated in his work that the middle class in Maharashtra was distinctly different from the middle class in Bengal or North India. Being awfully busy in much academic and administrative work, Prof. Dixit could publish his thesis almost after a decade with the title *Ekonisavya Shatakateel Maharashtra: Madhyamavargacha Uday* in 2009. Realising its importance, many researchers in the meanwhile photocopied his thesis for personal reading and reference. This book added another feather to his cap by securing him the R. N. Natu Award which was given for the historical work of 2009 by Maharashtra Sahitya Parishad in Pune.

Dr. Dixit is a widely published author of academic books and articles. He also penned many articles for newspapers and magazines. He was given the project of writing the History of University of Pune to commemorate the Golden Jubilee year of the university in 1999. He completed this stupendous task of writing a book in a short span of about six months. The book *Pune Vidyapeethacha Itihas* (History of University of Pune), in Marathi is a brilliant treatise written in a very poetic style and lucid manner. This book fetched two awards for Dr. Dixit, one being the Mahamahopadhyaya Datto Waman Potdar of Maharashtra Sahitya

2 A separate list of the publications of Prof. Dixit has been given in the Felicitation Volume at the end. For details, please refer to the list.

Parishad in Pune rendered for being the best historical work in Marathi in 1999. The second was Dr. Arvind Deshpande Award given by Itihas Shikshak Mahamandal in 2003.

Dr. Dixit has many edited books to his credit on varied historical themes. He has co-edited the book *Western India: History, Society and Culture* (1997), which is the Arvind Deshpande Felicitation Volume. This book is a good compilation of research articles on varied themes concerning the various facets of medieval and modern Maharashtra authored by renowned scholars who were closely associated with Prof. Deshpande.

Prof. Dixit has written extensively on the historical writings in Maharashtra. He completed the project of the compilation of the selective writings of historian T. S. Shejwalkar for Sahitya Akademi in 2007. He has made a colossal contribution for compiling and editing the two Volumes on the historical writings of Setu Madhavrao Pagadi in Marathi which have been published by the Marathi Sahitya Parishad in Hyderabad in 2010. Pagadi's historical writings comprised of three thousand pages which were divided into two volumes. Prof. Dixit had to complete the task of editing and writing introductions to the two volumes in a short span of three to four months as the volumes were to be published on the birth centenary of Pagadi in 2010. He being a man of discipline planned the schedule of work and used to finish the task of reading and editing nearly hundred pages per day in that entire span which required sittings of nearly 14 to 15 hours a day. The long introductions written to these volumes speak for his erudite scholarship.

Dr. V. M. Bachal wrote a voluminous work in Marathi on the History of Fergusson College. Nonetheless unfortunately he fell seriously ill and someone had to accomplish the incomplete task in order to bring it into a book form. Prof. Dixit was consulted for editing in this project to which he readily accepted for his long affiliation with the institute and also with Dr. Bachal. Dividing the three periods - 1885 to 1935, 1935 to 1985 and 1985 to 2010 - of the History of Fergusson College, Dr. Bachal had written three bulky volumes. Nevertheless, it was too ambitious a project to publish and hence, Prof. Dixit along with the publisher, decided to bring the voluminous works into one book. It required good editing skills to reduce two-third of its content to bring it into final shape. In an editorial note to the book, Prof. Dixit had discussed his job as an editor. This can be a good guideline for the researchers for editing work. He always

remained cautious for retaining the originality of the work. He removed the huge part of the content comprising reports as well as the memories shared by many associates of the college. One cannot do this work in a haphazard manner as there is always a risk of losing the significant content. Prof. Dixit has equated this task of editing to performing a complicated surgery without damaging the 'body of the work'. Secondly, he made many additions by way of footnotes and references to several historical facts mentioned in the work which substantially augmented the historical value of the work. Prof. Dixit crafted the work in final shape by applying his academic expertise in research and editing and the book *Vatchal Fergussonchi* was published in 2017.

The herculean task of revising and updating the book *Prarthana Samajacha Itihas* (History of Prarthana Samaj), written originally by D. G. Vaidya in 1927 in Marathi was assigned to Professor Dixit by the Asiatic Society of Mumbai on the occasion of the 150th anniversary of Prarthana Samaj. This work of Prof. Dixit is an epitome of good editing and historical research. The job of editing an old book is altogether different than producing an original work. Prof. Dixit has demonstrated in this work how editing should be done very carefully without harming the beauty of the original work. Nonetheless, the lacunae in the original work required to be removed. Some portions in the original work were scanty, the gaps required to be filled in and more references needed to be provided. Prof. Dixit has added 102 editorial footnotes and references to various historical figures and facts in the original work of D. G. Vaidya. This was done with twin purposes. Prof. Dixit was writing history of Prarthana Samaj after more than 90 years since Vaidya's book got published. So, many new sources became now accessible to the new historian. That way, Prof. Dixit brought many new historical figures and facts to light associated with Prarthana Samaj. Secondly, when D. G. Vaidya wrote this book in 1927, his readership was different. Hence, it was more than plausible that the names of few persons mentioned in the book might be unfamiliar to the present reader of the book. These additions amplified the historical value of the book immensely.

Professor Dixit, a conscientious and dedicated researcher, imposed lockdown on himself in this period, literally worked day and night on this work to complete the task in the stipulated period of seven months at the age of sixty-two immediately after retirement in 2017 from a very busy and exhausting long career. He made trips to Mumbai and Wai for

collection of sources. I have personally witnessed him at the Prarthana Samaj in Mumbai painstakingly taking notes and photographs of the documents by sitting for long hours in uncomfortable position without complaining. Being a passionate researcher, many a times he faced insomnia while working on the project.

The most significant contribution of this work is giving visibility to nearly 75 women who contributed in some way or the other in the social and religious services of Prarthana Samaj. In fact, it was a big lacuna of Vaidya's work ! This act of 'mainstreaming the gender' on the part of Prof. Dixit is a significant attempt of giving 'gender justice' in historical research. Moreover, he has written an entirely new chapter on the history of 'Prarthana Samaj' for the period of nearly 91 years from 1927 to 2018 and has also added a biographical sketch of D. G. Vaidya. This book offers unparalleled understanding of and a valuable insight into the history of Prarthana Samaj. His stylistic experiments and powerful language have also added to the aesthetic value of the book.

Prof. Dixit has to his credit numerous articles which include 45 research articles and 22 forwards or introductions written to various books and 35 book-reviews. Apart from that, he has authored 19 textbooks and edited 42 textbooks. Most of his research articles and lectures are focussed on the various aspects of the history of Modern Maharashtra which can be categorised mainly into three parts. First and foremost, he has made an attempt to analyse the contribution of various social reformers, thinkers or leaders of Maharashtra from Balashastri Jambhekar to Babasaheb Ambedkar and the various socio-religious reform movements including the women's reform movement in Maharashtra. Secondly, he has also contributed scholarly articles on the historical ethos in Maharashtra in various times and its linkages with the various forms of Marathi literature namely, poems, plays and historical novels. While dealing with these themes, he has very ably engaged himself into the theoretical discussions on the interrelationship between the discipline of history and literature as well. He has written extensively on the history-writing in Maharashtra of last two centuries. His gigantic articles in Marathi as well as English on historical writings covering a span of the nineteenth and twentieth century are actually of the magnitude of a book. He has brought out the contribution of nationalist historians like M. G. Ranade, V. K. Rajwade and has contributed as an editor an impressive Centenary Souvenir entitled as *Shatabdi Smaranika* of Bharat Itihas Samshodhak Mandal of

Pune in 2010. He has also made a fascinating work on the literature and thinking on Science in Marathi in Maharashtra in the 19th century. The exhaustive index of 187 books on science in Marathi produced at the end of the report is definitely a noteworthy contribution of the scholar.

Prof. Dixit has always remained critical about the education system in India which seldom provides rigorous training for research. He followed his own path of heuristics through explorations and experiments and created his own research methodology while conducting historical research. He never believes history as a mere record of historical facts in chronological order for he deliberates history as a hard-core of interpretation grounded on the solid base of historical facts. It meant an untiring search for sources and producing the historical facts upon which the edifice of historical interpretation can be built. Unlike the Positivist thinkers, he never denigrates the importance of non-archival sources for research. He has extensively used a variety of archival, non-archival sources as well as oral history and conducted field visits for his research too.

Prof. Dixit believes that after the growing identity politics, historical figures in Maharashtra or India such as Mahatma Phule and M. G. Ranade or Mahatma Gandhi and Babasaheb Ambedkar are unnecessarily shown in binary opposition which is unhistorical. This way history is seldom distorted and fabricated for narrow political gains. He feels that history written with malicious intent is not good either for healthy growth of the discipline of history or for maintaining social harmony in the society. He also contemplates that while analysing any historical figure, one should study the evolution in him/her taken place over a period of time rather than considering the personality as a static entity. When encountered with contradictions within a personality, he feels that the researcher should be able to interpret them in a balanced manner.

Prof. Dixit certainly appreciates some ideologies and respects some thinkers, but refuses to be a blind follower of any particular ideology. Nevertheless, he is not an anarchist or a pessimist. He is thoroughly progressive in thought and action and prefers to blend ideas in a positive way. He firmly believes that any ideology despite being very influential is not useful to understand any historical reality in totality. He adheres that ideology after all is a product of a certain social context and therefore, it may become irrelevant to understand the historical reality evolved in different space and time. Besides, any ideology is not complete in itself

and it extends giving rise to new set of ideas over a period of time. It also has its own pros and cons. He, therefore, always abstains himself from using any specific ideology to interpret the historical facts. He rather tries to analyse the historical figures or events by using his own analytical mind. He believes in following the path of non-violence, public morality, honesty and transparency. He has a strong dislike for the cult of intellectual arrogance, bitterness, hatred, revenge and exclusion.

While analysing the contribution of the various personalities or movements in Maharashtra, Prof. Dixit has always remained very cautious. He has refrained himself from producing either the hagiographical accounts or bitter criticism created through the lenses of the present. He always affirms that historical figures or events should be studied and interpreted in the historical context of their own. He opines that any historical figure or reformer had to work in the constraints of their own times and society. He continually takes the position that historical figures when judged from the lenses of the present can be unjust to them. He also believes in interpreting the historical facts in holistic manner. There is a tendency among scholars to evaluate or judge a historical figure by pointing at just one incidence in his/her life or by discarding him/her altogether by pointing to just one aspect of his/her behaviour and overlooking the other significant contribution made by that figure. Prof. Dixit, on the contrary, always makes an attempt to look at any personality by following holistic approach. Nevertheless, he believes that various historical figures of the same period exhibit different kind of sensitivities and capacities in terms of their contribution for social activism or in the nation building. Some seem to be more radical than others and therefore, it is certainly the job of the historian to point out and underline the differences, shades of thought and limitations of different historical personalities. But at the same time, he opines that the commonalities in the thoughts and actions of various historical figures also need to be reinforced in history-writing which is normally overlooked.

The writings and lectures of Prof. Dixit on Umaji Naik, Balashastrri Jambhekar, Mahatma Phule, Mahadeo Govind Ranade, Gopal Ganesh Agarkar, Bal Gangadhar Tilak, Ahitagni Rajwade, Rajarshee Shahu Maharaj and Dr. Babasaheb Ambedkar demonstrate this approach of analysing these historical figures in totality in their own historical context and therefore, Prof. Dixit could create very balanced interpretations of

the various stalwarts in Maharashtra. Nonetheless, he has always shown the lacunae and limitations in their thought or actions. So the various shades in the thoughts of various historical personalities have been very vividly brought out by him in his writings. The lecture delivered by him on his father, Ma. Shri. Dixit in the condolence meeting at Maharashtra Sahitya Parishad is a testimony of his balanced, moderate and candid expression.

Though Prof. Dixit has produced his research works both in Marathi and English, most of his significant writings and books are in Marathi. It has its own importance in a multi-lingual country like India since knowledge should be produced and transmitted in regional language for democratising the knowledge for the masses. And yet, his writings need to come up in English to reach out to the global readers of Indian history for their rich contents.

The intellectual prowess of Prof. Dixit did not make him an ivory tower professor secluded from the society. He never believed in any academic hierarchy and for nearly 25 years, he was associated with the working of school textbook committees of the government of Maharashtra in the capacity as a History expert. He was the Chairman of the History and Civics Committee, State Council for Educational Research and Training (S.C.E.R.T.) of the Maharashtra State. He was also the Chairman of the Board of Studies (History) of Maharashtra State Bureau for Text-book Production and Curriculum Research (Balbharati) in Pune and also for S.S.C. and H.S.C. Boards of the Maharashtra State. Prof. Dixit believes that the History textbooks should be made interesting, readable and student-friendly considering the age-group of the school children in order to make the subject of History popular among children. The textbooks should not be burdened with chronological details and figures which create dislike for the subject of history among students. He holds that ideas of freedom, equality, secularism and communal harmony can be best fostered in the young minds through textbooks. His textbook written for Standard III became very popular for its unique title 'Story of Man' and children-friendly writing style. The picture of a caveman and a cavewoman along with kids on the front page of the book was a powerful statement that history is a story of men, women and children too and not of *men alone*. This is noteworthy as history in school textbooks is usually presented in a patriarchal fashion as 'story of great kings or men' alone giving no heed to common men or women in the making of history.

Prof. Dixit in the short span of two years wrote three books with co-authors and edited about forty-one books with co-editors for Y. C. M. Open University at Nasik. These books are extremely popular among the students across Maharashtra and they have set an example of excellence in text-book writing. Prof. Dixit in his early career wrote History textbooks for Standard eleventh and twelfth which were approved by the H. S. C. Board of the Maharashtra state. These books written in very articulate style were so popular among students that many editions of these books got published over the years. Though these were meant for either eleventh or twelfth standard or for under graduate level, these were also widely used as a ready-reckoner for Civil Service aspirants. It is remarkable that once a blind student who had cleared the SET examination came to meet and express his sense of gratitude to Prof. Dixit in the university for his wonderful textbooks. The student mentioned that a group of blind students got the audio recording done with the help of few friends based on the reading of some of his textbooks and they used these recordings extensively for the preparations of the competitive examinations. These books proved very beneficiary to the Marathi medium students also, since the translated material of standard History textbooks authored by scholars such as Romila Thapar, Bipan Chandra, Satish Chandra were not available in those times. Prof. Dixit, through his writings brought all recent knowledge and terminology on the History of Ancient to Modern India in Marathi. These books were good attempt of democratisation of the historical knowledge. Since last four decades, the interference of various social and political parties and groups in the reframing of textbooks has increased enormously and Prof. Dixit has consistently expressed aversion for this on various public platforms. Facing such challenges, he worked on the textbook committees for a long time as he is of the view that one needs to be in the system to change the system.

Prof. Dixit is associated since last 35 years with Itihas Shikshak Mahamandal, Maharashtra, which is a State Level School Teachers' Organisation set up in 1974 to promote the history education and to enhance its quality and currently he is working as its advisor and editorial advisor for its journal *Itihas Shikshak*. Through this long association he has remained instrumental in designing various programmes for school teachers as well as for school children for prompting quest for history and historical knowledge. Prof. Dixit has devoted his valuable time in various activities of the Mandal such as annual History Talent Search

Examination held among school-children across Maharashtra.

Being a charming, soft-spoken and easy to approach professor, Dr. Dixit has always remained a very popular teacher and popular figure in the academic world. He constantly used to be surrounded by people in the university. He has earned enormous respect from many generations of students. His sheer love for students and earnest desire for their better career is just amazing. His warm feelings for students have been rightly manifested when he dedicated his book *Pune Vidyapeethacha Itihas* to the students of the university. He belongs to the group of professors who have shaped and influenced many generations of students.

I am fortunate to have a long association with Prof. Dixit of twenty-five years since my post-graduation at the Department of History of University of Pune in 1996. I being a hostelite, staying away from my family members always received more affection from him than the day-scholars. I was privileged to receive his able guidance for my M.Phil. and Ph.D. degrees in which I have made an attempt to use Vibhavari Shirurkar's writings as a source of reconstructing social history of Maharashtra. It was certainly an enriching and rewarding experience to work under him which included very long interactive sessions full of intellectually stimulating and insightful discussions on various themes such as sociology of literature, gender history, women's reform movement in Maharashtra, research methodology and writing skills to mention a few. We share certain common interests such as love for literature, theatre, language, history and many more. I had a wonderful experience of working along with him on various platforms or projects such as eighth standard History textbook writing for Maharashtra state, working of Itihas Shikshak Mahamandal or syllabus revision committees of various universities. It is possible to write a long article on my association with my revered Guru which I incline to do in near future. Nonetheless, my relationship with him can be summed up in the words that he has truly become a friend, philosopher and guide for me.

Pune University used to be crowded with poor and needy students coming from various corners of Maharashtra. Students especially from socially deprived groups with rural background used to lack confidence and rather they faced inferiority complex due to their poor communication skills and low proficiency in English. Prof. Dixit used to go out of the way to help such students; he used to boost confidence in them by giving them counselling and training. He helped them in

various capacities - by taking some of them on various projects and helping them to earn while learning.

Prof. Dixit never selected research students on the criteria of their merit alone. He accepted many average students coming from diverse social background and inculcated in them the spirit of discipline of research and carved out a good band of researchers. His research students have always experienced how a loving teacher transforms into a hard task master who shows no sympathy or kindness as a research guide. He gave ample freedom to the researcher in perusing research or while expressing one's own views, but he would never compromise the quality of the work. Many of his students feel that his perfectionist attitude in terms of academic excellence, his insistence on accuracy in terms of research, language, grammar and choice of words all are really worth inculcating !

Prof. Dixit provided research guidance to thirty-four students for M.Phil. and Ph.D. degrees. Nonetheless, throughout his life, he has provided very valuable guidance to hundreds of students by being their mentor guiding them on academic as well as personal matters. He remained awfully busy throughout his career and therefore, sparing time for students to reach out through personal meetings, emails or phone calls meant upsetting the tight schedule of his weekly plans. Despite this fact, he used to take out time for students due to his tremendous affection for them, his kind-heartedness and also because he always considered it as his social and academic commitment. This 'timely contribution' has proved so valuable a service that lives of many of students are shaped out of them. His words used to make magical impact on the students who used to meet him in a depressed or frustrated state of mind and they used to leave his cabin with a smile, optimism and self-confidence on their face. Another remarkable fact is he always treated students with dignity and honour. Over the years, some of his students become his close and favourite disciples; yet in all public interactions, he consciously treats all the students equally. No wonder, he has remained a role model for a number of students.

Prof. Dixit is always known for his elegance, student-friendliness and discipline among students. His students still cherish the memories of his wonderful lectures in the university. He always engaged classroom lectures very religiously and seriously. He constantly used to give students a new food for thought. A dedicated and very methodical

teacher at heart, he every time planned his teaching in advance. He always completed syllabus well in time and conducted lectures in a much disciplined fashion but of course, without compromising the quality. Students all the time enjoyed and looked forward to his lectures. His lecture of one hour used to be very compact, structured and illuminating. Being a man of discipline, he used to complete teaching on any topic within the stipulated time without digressing much from the theme. His lectures showed his mastery over the historical facts as well as the different interpretations. Students found many assets of his teaching methods worth emulating. He always shared his research articles with post-graduate students and asked for feedback. He encouraged students to use the classrooms as laboratories to make academic experiments. He inspired students to read the original writings of the various thinkers of Maharashtra from Balshastri Jambhekar to Dr. Babasaheb Ambedkar. He is always magnanimous in sharing his knowledge and resources with students and colleagues. He has left an everlasting impact of his personality on many generations of students.

Prof. Dixit has personified in him a far sighted and strong willed thinker, forceful speaker and convincing debater. He has strong faith in 'human goodness' and he believes that the fight with the wrong thought can be pursued with right thought alone. Throughout his carrier he has delivered more than five hundred guest lectures at various seminars, conferences and public platforms in Maharashtra and India. He has nearly forty lectures of prestige to his credit delivered in various cities of Maharashtra. Nonetheless, he never considered it as below his dignity, to accept an invitation of a guest lecture from a college in a remote village of Maharashtra. Basically being a socially committed academician at heart, he never loses an opportunity to interact with and educate the socially unprivileged groups like women, Dalits, children and workers to mention a few. He has delivered lectures at international conferences and at slum areas, women's groups, orphanages, Muslim localities, children's gatherings and rural regions with the same ease and commitment. His constant travelling for guest lectures outside Pune rarely used to be luxury trips. Prof. Dixit, after returning from tedious over-night journeys many a times used to conduct classroom lectures the next morning in the university.

A good public lecture on any theme is a product of consistent sincere efforts. One has to have good grasp of the subject which never comes

overnight! It is the outcome of the devoted hours of passionate reading, notes-making, painstaking work and constant rethinking ! Delivering lecture is an art which can be nurtured over the time. In an academic world, there are very few scholars who are blessed with all these qualities. Prof. Dixit is one of them. He has constantly engaged himself in upgrading his knowledge and scholarship and therefore, his lectures never became uninteresting or monotonous.

History as an academic discipline though engages comparatively smaller section of the society, the society at large has deep concern for history for it gives them a sense of collective identity. The discipline of History has very considerable strength and relevance to the understanding of the Indian society. Prof. Dixit through his public lectures has played a significant role as a public intellectual in shaping the public opinion about Indian history. Though he started his teaching career in Post-Nehruvian era, he seems to have imbibed the spirit of optimism and idealism of Nehruvian times. He has strong faith in the values articulated in the Preamble of the Indian Constitution such as equality, liberty, justice, brotherhood and he strongly believes in humanitarian principles and constructive methods. He has always shown deep concern for the issues and challenges Indian society is facing since independence. In the post-eighty decades, India witnessed widespread growth in communal politics and fascist and obscurantist tendencies which hampered the secular environment in the society. It has made any healthy communication on any historical theme almost impossible. Prof. Dixit is vigilant of the changes that shaped the political environment in India in the post-liberalization times. He has incessantly expressed resentment towards the all-party fascist tendencies pertaining to history-writing. He has unceasingly taken a stance at various public platforms about the relationship between history and dictatorship as well as upon the social challenges of fascist tendencies, social censorship and cultural terrorism faced by the researchers and the need for the spread of 'historical literacy' - the term which he has coined and advocated in his deliberations.

Few social groups or organizations have become oversensitive and intolerant upon historical writings and few others have started using History or historical figures to fulfil their narrow political motives in the present times. Moreover, it has led to either falsification or deification of certain historical events or perversions of legendary figures such as

Chhatrapati Shivaji Maharaj, Mahatma Phule, Lokmanya Tilak, Swami Vivekanand, Mahatma Gandhi and many others. Medieval India has at all times remained a fertile region of creating communal interpretation of the past. All such battles against fabrication or misrepresentations of history need to be fought continuously by way of giving 'alternate' interpretations of history and historical figures which Prof. Dixit is doing relentlessly through his public lectures for several years. While discussing any of the public figures, he presents an 'alternative' image by producing a number of quotes from the primary sources to nullify the influence of the false image and educates public mind. He always encourages the flowering of local history projects which in a way help preserve the local culture and dialects in the tides of globalisation. He has deep concern for the underprivileged groups in Indian society and he has uncompromisingly welcomed the new voices in history and alleged that the new interpretations of history coming from the subaltern groups such as Dalits, women, tribals, peasants and workers in India will surely widen the horizon of historical knowledge and understanding of the past.

No wonder, in appreciation of the splendid contribution of Professor Dixit to the field of academics and research, he has been honoured with many life-time achievement awards such as Dr. Manibhai Desai National Service Award (Rashtraseva Puraskar of Dr. Manibhai Desai Pratishthan of Urali Kanchan, Maharashtra) in 2003 and Prin. V. K. Jog Career Award for teaching and research of University of Pune in 2007. He also secured Guruvarya Ma. Kru. Kerulkar Itihas Shikshak Puraskar (Life-time Achievement Award) by Itihas Shikshak Mahamandal in 2016. He received the most acclaimed Maharshi Vitthal Ramji Shinde Puraskar (Life-time Achievement Award of Ra. Na. Chavan Pratishthan of Wai) in 2019. Recently, he achieved Late Smt. Sarojben Parikh Award for Diligence and Excellence in the month of March in 2020 in Pune. It is an old saying that behind every successful man, there is a woman. It is very true about Prof. Dixit as his life partner Mrs. Meenal Dixit has very ably looked after the home front when Prof. Dixit has devoted himself to the academic world. What can be a better reward than having a wonderful soulmate like her and son like Nikhil with remarkable understanding and maturity in one's life-journey?

Having keen interest in theoretical deliberations on history and philosophy of history, Prof. Dixit through his articles and public lectures, has made an attempt to reflect upon some fascinating topics such

as 'History and Objectivity', 'History and Space', 'Regional History', 'Orientalism and History', 'Local History', 'History and Interdisciplinarity' and many more. It is his earnest desire to produce a monograph on Philosophy of History which he could not pursue so far due to his several other engagements. I conclude this note by expressing all best wishes to Prof. Raja Dixit for long, healthy and cheerful life fulfilling all his dream projects.

Editorial

Jaswandi Wamburkar

Modernity is one of the most discussed and debated concepts among social scientists in the recent times and yet it sounds little ambiguous. Notwithstanding the debates, there is a consensus among the social scientists that modernity is a new way of human life based on nation-state and democracy that manifests belief on individualism, liberty, equality, scientific worldview, rational attitude and a rejection of tradition. It has also been perceived as a movement from feudalism to capitalism, market economy, industrialization, urbanization and secularisation, the development of the nation-state, representative democracy and public education.¹ Anthony Giddens while discussing the key elements of modernity has cited the theoretical contributions of Karl Marx, Emile Durkheim and Max Weber and summed up the basic elements of modernity namely, capitalism and the emergent economic system, complex division of labour, rationalisation as expressed in technology and in the organisation of human activities.²

Though the dictionary meaning of the term denotes as the quality of being contemporary, it is necessarily a value-based term which is generally applied to a specific period in the wake of renaissance. The word modernity has been derived from the Latin adjective *modernus* which is attested from the 5th century in the context of distinguishing the Christian era from the pagan era. It has been first coined in the 1620s, to refer to the implications of a historical epoch following renaissance.³ Nonetheless, one of the first usage of the term Modernity was made

by the French poet Baudelaire who defined it as: “Modernity is the transient, the fleeting, the contingent.”⁴ He used the concept in terms of modern painting to denote the spirit of creativity and renewal in modern art; however the term has a wider political resonance in the spirit of revolution of the nineteenth century. By and large, modernity is periodized into three stages namely early, classical and late to the periods - 1500-1789, 1789-1900 and the third-1900 onwards till 1989 and the subsequent period is recognised as of post-modern.⁵

Modernity is a multi-dimensional movement and different cultures and nations demonstrate variants of modernity and similarly, its absorption in the various communities in the same nation also differ to major extent. Lloyd Rudolph, Susanne Rudolph, Yogendra Singh and Dipankar Gupta have discussed multiple dimensions of Indian modernity. Lloyd Rudolph and Susanne Rudolph have illustrated that any discussion on Indian modernity is not possible without a deep understanding of Indian tradition.⁶ Yogendra Singh has contemplated that with the advent of modern values in India which are universal, its confrontation with the cultural values rooted in the local Indian traditions which are particularistic became inevitable.⁷ He has argued that considering the pluralistic nature of Indian society in terms of history, ethnicity, culture, tradition region and caste, the modernity manifested itself in diverse ways. Dipankar Gupta has argued that Indian modernity is not a monolith and there are ‘multiple modernities.’⁸ The author’s perception of Indian modernity is explicitly expressed in the following statement: “India is changing rapidly, industrialization and urbanization are growing exponentially, and yet our distinctly unmodern attitude still conditions our social relations.”⁹ Gupta points out five basic traits of modernity - dignity of the individual, adherence to universalistic norms, elevation of individual achievement over privileges or disprivileges of birth, accountability in public life and the ability to trust social institutions. He has argued that Indian society falls miserably short to fulfil these conditions and India has a long way to achieve these goals. He has categorically specified that all that is contemporary is not necessarily modern and rather, traditionalism has been strengthened in the wake of modernization by defining some traditions as modernity.

India has progressed through a unique history vis-à-vis the Western world as the former experienced a complex phenomenon of renaissance, age of modernity and shift to capitalist mode – all almost in the same

period under the shadow of colonial yoke. Various regions of the nation observed similar and yet distinct phenomenon evolved through its own distinctive regional history. It is a very creative period in the Indian history in the sense that many ideas of our modern life have been processed, contested, shaped and reconstructed through the process of continuity and change in the same era.

Regional history is a well-established area of research in a country like India with an enormous diversity in terms of cultures, traditions, languages, dialects, history and topography. History of Modern Maharashtra is one of the fascinating and vibrant periods of the past. Modernity and its manifestation in various fields has remained a thrust area of research of Professor Raja Dixit which has been illustrated in the bio-note on him. Besides, his close associates have also contributed meaningfully in this area. And hence, I thought it would be apt to have the felicitation volume in honour of Prof. Raja Dixit on this pertinent theme. The present volume seeks to unearth some of the processes and contributors that influenced in shaping modernity in Maharashtra. The sequence of the articles in the volume is arranged according to the chronology of the content of the articles.

While discussing the factors responsible for the advent of modernity in Maharashtra, the colonial rule is given its full credit for initiating the material changes that had a deep impact on the economy and social life in Maharashtra leading to the rise of a new caste-class based society. It has also been claimed that the introduction of the western education and new means of transport and communication such as railways, trams; post and telegram etc. revolutionized the human living as well as thinking. Nevertheless, these notions have been challenged by the scholars Dr. Arvind Deshpande and Dr. Raja Dixit who have illustrated through their research that 18th century Maharashtra was not as static and stagnant as it was projected by 'colonial masters' and rather this period showed potentials of social mobility.¹⁰ They have traced the impact of the local factors such as the role of the Bhakti movement, the rise of the benevolent self-rule of Chhatrapati Shivaji Maharaj and the expansionist policy of the Peshwas which acted as catalyst agents of modernity in Maharashtra. They have also argued that the indigenous process of social change has been ruptured by the advent of the foreign rule.

19th century was an era of resurgence in India as also in Maharashtra

which necessitated the redefinition of Indian identity vis-à-vis the British rulers. The social reformers and leaders did not believe in blind emulation of the western ideas; on the contrary, they came up with original critic of the western ideas of utilitarianism, rationalism and liberalism. This tradition begins with Lokahitwadi, Mahatma Phule, Mahadeo Govind Ranade and Vitthal Ramaji Shinde to mention a few. They also derived strength from the Indian traditions by embracing Gautam Buddha, Kabir, Bhagwat Dharma and Saint Tukaram. The reformers who had to make a difficult choice between 'tradition' and 'modernity' constantly faced the threat of the 'loss of identity' by the total westernisation of the Indian culture. The new identity was reshaped through the peculiar amalgam of the old and the new. The idea of Indianness has been reshaped through a conglomeration of local and regional, regional and Indian and Indian and global.

This period was also characterised by the varied socio-religious reform movements that aimed at the secularisation of public life at one hand and democratisation of social relations and institutions on the other. Synchronously, it also saw an upsurge of reactionary, obscurantist, revivalist and communal trends joining hands with the feudal, capitalist forces and imperial state reinforcing status-quo. All these movements also brought various issues of tradition, modernity and identity on the forefront. The period was marked by the dynamic and multi-faceted national movement which was complemented by the rise of consciousness in the depressed classes such as Dalit, tribals, women, peasants and workers who heralded egalitarian movements to bring equality in terms of caste, class and gender.

The advent of modernity in Maharashtra gave rise to cultural expression in various arenas such as print culture, literature, history-writing, music, visual arts, theatre, cinema and so on. The newly rising urban centres became the hub of new cultural manifestations such as stage music, newspapers, magazines and calendars. Nonetheless these forms were closely intertwined with the social and political movements of those times which became a platform to disseminate the issues of nationalism, modernity and tradition to the larger audience. Though many artists, reformers, writers and intellectuals manifested their ideas in regional language, they invariably expressed national consciousness and deeper concerns for issues of national importance. This is the wider canvas on which the various papers in this volume have been located.

The century also witnessed a significant change brought in by the introduction of print media which revolutionized the diffusion of knowledge. On the one hand, it led to the flourishing of print culture and on the other hand, it emerged as a commercial business bringing abundance of religious as well as secular literature in regional languages in the market. The reformers in Maharashtra while accepting the western values, often invented an indigenous tradition to support to their egalitarian movement. The tradition of Bhakti movement and its literature thus was an invention to mould a new identity of Maharashtra.

Professor Irina Glushkova in her paper has brilliantly brought out that the technological progress in the wake of a specific socio-political milieu, brought profusion of production and circulation of the images of the legendary saint poets Dnyaneshvar and Tukaram making them not only a linchpin of the Varkari community, but also a symbol of regional identity in the modern Maharashtra.

Dr. Glushkova through her painstaking research has brought out the earliest images of these poets by giving not only graphic portrayals of the images but also by explaining the reasons of the alterations into them. She has argued that amidst the many images and cinematic presentations, one superseded over the others and emerged as the exultant images in Maharashtra. Dr. Glushkova has demonstrated with countless minute descriptions of the ornaments, headgears or facial expressions of the images an interesting fact that the representations of the saint-poets have been reincarnated by the artists in their own image. Considering the potentials of more research on this theme, she has expressed the urge to take it ahead by the future historians.

There was a constant exchange of ideas among social reformers and leaders of different parts of the nation regarding various issues pertaining to modernity and nation-building. The regions of Maharashtra and Bengal share very close bond in terms of social reforms, literary expressions, translation works and music. It would not be wrong to cite few examples of such collaborations here. The close association of Brahmo Samaj and Prarthana Samaj has well been discussed by scholars of both the regions. R. C. Dutt and Rabindranath Tagore had deep reverence for Chhatrapati Shivaji Maharaj which has been revealed in their literary works namely the historical novel of R. C. Dutt, *Maharashtra Jivan Prabhat* (1878) and the classic poem of Rabindranath Tagore *Shivaji Utsav* (1904) – both celebrating the heroic deeds of the king. The translations of numerous

Bengali plays and novels into Marathi by the well-known dramatist Mama Varerkar are well-known.¹¹ Nonetheless, both these regions showed different kind of flowering of modernity and developments in social as well as political life with different shades of thought. It is a worthwhile exercise to juxtapose the different manifestations of modernity in these two regions which has been undertaken in three papers of this volume.

The most significant aspect of modernity was ushered by the social and religious reform movement in various parts of the nation. Since religion was so intrinsically linked with the social life in India that it necessitated to reform religion on one hand and initiate eradication of the social evils on the other. Nonetheless, each reformer envisaged the social reform in a different manner which gave rise to different shades of thought regarding the nature, pace, strategies and course of the movements.

Professor Varsha Shirgaonkar in her article has made a meaningful exercise of exploring the analogies between the thoughts of the conservatist reformers of nineteenth century specifically Bhudev Mukhopadhyay (1827-1894) of Bengal and Vishvanath Narayan Mandlik (1833-1889) of Maharashtra. She has shown many striking similarities between these two personalities pertaining to their services for female education, scholarship on law-books in Sanskrit and stand to work independently without being associated with any of the contemporary organisations. Nevertheless, her article focuses on their approach of 'reform within' the society without recourse to legislation. By citing their views in terms of widow remarriage, child marriage and ban on sea-travel, she has demonstrated that they both were progressive in outlook but at the same time, envisioned Indian tradition as a blend of progressive as well as regressive traits and therefore, they wanted to bring reforms by citing Indigenous sanction to social reforms rather than the British interference in the Indian social system.

Parthana Samaj is one of the important organisations which have played significant role in the socio-religious movement of India. Nonetheless, for a long time, it was assumed that the visit of the Brahmo reformer Keshav Chandra Sen to Bombay in 1864 was instrumental in the foundation of the Parthana Samaj in 1867. Few scholars have even perceived Parthana Samaj as a replica of Brahmo Samaj.

Professor Aravind Ganachari in his article has challenged this premise and has brought out a comprehensive picture about the Parthana Samaj

in its embryonic phase. He has explored the intellectual debates at length stirred in the reformers of Bombay after the visit of Sen as well as their ideas about the nature of the Prarthana Samaj by producing very many fresh sources in the form of the contemporary newspaper articles. By citing the different view-points expressed by the members of the Samaj such as Ataram Pandurang, Dadaoba Pandurang, Bhau Daji Lad and M. G. Ranade, he has demonstrated that the reformers in Bombay had quite different ideas about the Prarthana Samaj from the Brahmo Samaj of Bengal right from its genesis. The most interesting part of the article is the attribution of two articles to M. G. Ranade by way of textual criticism and circumstantial evidences, which shed light on new facts about the Samaj.

Though modern education was introduced by the British rulers primarily to create a band of *baboo* (clerks) to man the administrative machinery of the state, it was publicised as a part of the project of the 'civilising mission' of the rulers to release them of the 'White man's burden.' Nonetheless, western education had the potential of being a powerful instrument of diffusion of knowledge and therefore, almost all the social reformers in India found in education the panacea for social change. Yet, it certainly had many lacunae which in the course of time were emphatically brought to the forefront by many social reformers and thinkers such as Mahatma Phule, Pandita Ramabai, Mahatma Gandhi and many reformers came up with several indigenous educational institutions in the first few decades of the twentieth century. Nevertheless, Mahatma Phule and Savitribai Phule were the pioneers in the field of mass education and especially for the education of two subaltern groups – Dalits and women.

The paper of Prof. Umesh Bagade throws light on the contribution of Mahatma Phule as an organic intellectual in giving a new tool of an alternative education in terms of approach, content and pedagogy to combat the Brahmanical hegemony. He has vividly explicated Phule's understanding of the link among hegemony, exploitation and knowledge by illustrating on the one hand, Phule's analysis of the hegemonic and exploitative role of the Brahmanical knowledge disseminated through myths and Puranas and on the other hand, his criticism of the colonial education system based on meagre funds, lack of infrastructure and utter disregard towards pedagogy, content and wider spread of primary education. He has argued that Phule's pedagogy that aimed at cultivating

critical faculty among the students and his alternative history of the caste-subaltern ascertaining facts from mythology brought radical shift in Dalit consciousness which has been illustrated in the writings of Mukta Salve and others.

The British rulers often projected their rule as a 'rule of law' as against the 'Oriental Despotism' of the indigenous rulers which implied that the British state considered all its subjects equal irrespective of their different social identities. The Western world was frequently presented as scientific, rational and egalitarian as against the Indian world full of unscientific, caste-ridden discriminatory practices which in a way, was an attempt to gain legitimacy to the British rule. Many post-colonial scholars have dismissed these claims and exposed the 'mask' of conquest behind the economic exploitation of the colonized. Next few papers in the volume have contributed significantly to expose such myths.

Dr. Madhumita Bandopadhyay in her article has argued that while railways have been conceived as a means for progress or development, it also has other side of the story. Based on rich archival sources, her paper discusses the case study of the impact of the Bombay Baroda and Central India Railway Company (BB&CI) built during 1852-1869 connecting the two important metropolis cities Bombay and Ahmedabad, on the society in general and certain communities in particular. She has explored that the communities and social groups such as *Talbda Kolis*, *Vanis* of Marwar, the *Audichs* of Gujarat, the *Saravariyas* of Oudh, *Gujarat Kasias*, *Parsis* and *Angrias* etc. who conformed themselves to the railway were the beneficiaries; nevertheless, railways brought a death blow to many traditional livelihoods of several communities such as *Khatris*, *Dheds*, *Sunni Bohras* *Nagoris* and other leaving a vast population in an impoverished state.

Social change can be achieved not by human determinations alone but most of the times along the line of the material forces. It is ironical that the enlightened Indian social reformers were trying to bring equality in Indian society in terms of caste, class and gender, but the British policies were responsible for consolidating the caste-occupation nexus in colonial times.

Dr. Chandrakant Abhang in his article has unearthed an unexplored but significant area - the role of the British rule in bringing the institutionalization of manual scavenging in the colonial Maharashtra. Based on untapped archival sources, his paper argues that the British

sanitation policies led to the institutionalisation of Manual Scavenging in Maharashtra. He has explained that the overpopulation in the new urban centres like Mumbai, Pune and Nasik created problems of epidemic diseases forcing the government to take up the issue of sanitary management and public health in a concrete manner. He has discussed that the migrants such as *Bhasod*, *Changadi*, *Hela*, *Lalbegi*, *Makhiyar* and *Shaikh* which were traditionally held responsible for cleaning work in Gujarat and Rajputana accepted these lucrative jobs. He has also pointed out that despite the recommendations of alternative innovative methods and techniques to manual scavenging by Indians, the British rulers adhered to the same practise and thereby consolidated the institutionalization of manual scavenging in the colonial Maharashtra.

English education and the introduction of the English language and literature were the cultural tools in the hands of the colonial rulers to create hegemony over the Indian subjects and to rule with their consent which have aptly been reflected in Macaulay's statement that eventually become the bedrock of all British colonial strategy, - "We must at present do our best to form a class who may be interpreters between us and the millions whom we govern - a class of persons, Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect."¹² Many Orientalists studied Indian languages and literature; translated and published Indian classical texts with their commentaries on them. These exercises on the part of the British administrators did not originate out of sheer love for knowledge but, to use Bernard Cohn's words, "the command of language" was to enable them to exercise a "language of command."¹³ The British rulers introduced English literary study in the curriculum in India before its institutionalization in England¹⁴ and had its beginnings as a strategy of colonial management.

It must be remembered that the modern Indian literature emerged in this historical context and it is a valuable exercise to understand how varyingly the Indian intelligentsia in different parts of the nation responded to it. The newly educated Indians began to do new literary experimentation in the Indian literature. Dr. Chandrani Chatterjee in her article has made an analysis of the literary experimentations by juxtaposing Bengali sonnet and Marathi sonnet in their larger historical contexts. She has argued that the new forms of literature should be seen as one of the enterprises of the newly emerged middle class whose ideas about living had changed profoundly in the new age.

Dr. Chatterjee has claimed that the experimentation with the sonnet in Bengali by Michael Madhusudan Dutt and others as also in Marathi by Keshavsut and others was neither a total emulation nor a complete exodus from the European form and moreover, their commitment to write in their own language was an attempt to subvert the power politics of the colonizers. She has explored that sonnet as a new form was assimilated in the canon of Bengali literature whereas Marathi sonnet diminished over the years which she has attributed to the different factors such as local and regional histories, cultural milieus, creative artists and their audience which play a decisive role in the processes of adaptation and reception of literature.

It has been rightly pointed out by Prof. Arvind Deshpande that 'almost all the battles of social values and social structure in Maharashtra were also played on the battleground of literature.'¹⁵ It is indeed, applicable to other means of cultural representations such as theatre, music and cinema. Maharashtra has a very rich and long tradition of theatre and it was closely associated with various movements including the Indian national movement. Prof. Shraddha Kumbhojkar has made an attempt in her article to study Marathi theatre as a source to understand in what way modernity was perceived, understood and narrated for the consumption of the society in colonial Maharashtra. Based on the textual analysis of the plays, she has discovered how these plays reflected upon the caste tensions on one hand and gender stereotypes on the other.

Dr. Kumbhojkar has argued that though modern play emerged as a new form deviating itself from the old folk art form in the last quarter of the nineteenth century, it could not inculcate the quintessential values of modernity and remained contented with making mockery of the pertinent issues of social reform movement such as women's education and anti-caste struggle. She has concluded that the society too paid more attention to the peripheral signs of modernity but showed reluctance in accepting the philosophical aspects of modernity identifying them as foreign and inferior.

The scientific history-writing began in India and Maharashtra only after the advent of British rule. Nevertheless, history-writing was a project of the colonial masters to gain legitimacy to rule by projecting them as better rulers than their predecessors in India. Likewise, in the wake of the eighteenth century, the Western Orientalists found in 'Orient' a new world different than the 'Occident'. However, it was not an objective

representation of the East but rather an attempt of ‘the Orientalisation of the Orient’ from the Western lenses.¹⁶ Nonetheless, the writings of pioneers in India such as William Jones, Henry Thomas Colebrooke and Max Muller to name a few, gave rise to a new academic discipline called ‘Indology.’ They invented and disseminated Indian literature widely in the world which created enormous curiosity in the young western educated Indian intellectuals towards their own cultural heritage and history. Maharashtra has contributed immensely by producing a good number of erudite, renowned In-house Orientalists such as Bhau Daji Lad, R. G. Bhandarkar, P. V. Kane and V. V. Mirashi to name a few.

Dr. Meena Vaishmpayan in her article has brought out vividly the contribution of a lesser known Indologist Shankar Pandurang Pandit (1840-1894) whose scholarship was recognised in his own times. Dr. Vaishmpayan has exemplified his contribution in creating critical editions of certain Vedic texts, selected Sanskrit classics of Kalidas and a few old Marathi texts. She has argued that due to his expertise in many ancient languages and Indian history, he could prepare the critical editions of the Indian texts in more competent manner than his European counterparts. Though a couple of biographies of S. P. Pandit are available in Marathi, there is a dearth of write up on him in English which has been fulfilled by this article.

R. G. Collingwood’s statement ‘all history is history of thought’ indicates that the historian makes an attempt to understand the thought behind the human actions in the past. Intellectual history is a discipline which studies the history of ideas explicitly, the evolution, the various shades within a particular school of thought and its impact on the society. Modern Maharashtra is prominent to have produced a good number of thinkers in the colonial times who expressed their thoughts touching upon several issues of India in particular and the world in general. Their thoughts are vital not only to understand the evolution of Modernity but are also relevant to solve many contemporary social and political issues in India in the wake of globalisation and neo-liberal world. Two papers in the volume shed light on the contribution of two Gandhian thinkers - Sane Guruji and Senapati Bapat.

Professor Yashwant Sumant’s article vividly explains the political ideas of Senapati Bapat. He has argued that political thought of Senapati Bapat, is formed by blending ideas of democracy, ideologies of Socialism and Gandhism; and also by the philosophy of ‘Geeta.’ Prof. Sumant has

brought out in a persuasive manner Bapat's theory of *Sama Satyagraha* as a unique combination of a triplet - revolutionary violence, the Gandhian technique of *Satyagraha* and the Hinduist appropriation of Gandhi's philosophy of *Satyagraha* which recognises self-killing as a means of political resistance. Prof. Sumant has explored Bapat's views of future India founded on the ideas of democratic socialism, humanitarianism and communal harmony which stemmed through the apprehension of the issues such as urban-rural and rich-poor dichotomy, problem of minorities and the pluralist nature of Indian society.

History of Science and Technology along with the History of Medicine and Public Health are some of the new areas of research emerged in the recent past casting light on the various contours of the history of Modern Maharashtra.¹⁷ The British government gave impetus to the spread of science and technology in India. Mount Stuart Elphinstone, a far-sighted liberal governor of Bombay Presidency along with George Risto Jervis and with the establishment of Bombay Native School-Book and School Society pioneered modern education in Maharashtra.

The article of Dr. Abhidha Dhumatkar illustrates the contribution of Dr. Harold Mann (1872-1961), the first Principal of the College of Agriculture in Pune who pioneered agricultural research in Western India by encouraging various departments in the college. Based on untapped archival sources, Dr. Dhumatkar has explored his role in promoting intra-departmental and inter-departmental research during his tenure. She has demonstrated that the research carried out in the field of Agricultural chemistry was useful in the agro-based industries while in other branches such as Agricultural Economics, Entomology, Agricultural Engineering and Veterinary Science proved useful to the poor farmers in the Deccan to improve their knowledge for better yield, irrigation facilities, insecticides and care of domestic animals. She has very well explained that Dr. Mann was influential in the spread of Agricultural science among lay farmers by establishing agricultural schooling through vernacular languages in Bombay Presidency. She has also unearthed his contribution in the branches of Botanical garden and Horticulture, fruit culture and cross breeding.

With modernity, cinema emerged as a powerful medium of entertainment as well as mass education especially in a country with very low rate of literacy in the early decades of the twentieth century. Bal Gangadhar Tilak was a versatile leader of the masses who was aficionado

of variety of mediums such as *kirtan*, newspaper, lectures, theatre, music and public festivals to propagate the ideas of *swadeshi* and nationalism. Dr. Rashmi Condra in her paper has discussed views and role of Lokmanya Tilak and Dr. Babasaheb Ambedkar about Indian cinema as a medium of mass awakening. She has reflected upon the encouraging role of Tilak in supporting the *Swadeshi* cinema by extending support to Dadasaheb Phalke, the founder of Indian cinema and a few struggling new-comers either by raising finances or giving them publicity in his own newspapers or on public platforms. Her paper has traversed a different aspect of Dr. Babasaheb Ambedkar by focusing his views on cinema. She has illuminated that he shared similar opinions about films as being a very effective and potential instrument of education than books and strongly opined that films should be seen more frequently by Indian people to live a cheerful life.

On the eve of independence, the Pandharpur Temple Entry Satyagraha was launched by P. S. Sane alias Sane Guruji (1899-1950) - a Marathi writer and a freedom fighter. Dr. Chaitra Redkar's article takes a historical overview of the debates surrounding the Pandharpur Temple Entry Satyagraha. The whole debate raises certain fundamental questions about the feasibility of reforms in Hinduism, the agency of such reforms, qualities and credentials of the reformist, the identification of authority who will grant these reforms and so on. In the context of this debate this article gives a faithful reading of the Gandhian position of temple-entry and problematizes the issue of the efficacy of Satyagraha for reforming Hinduism and relevance of reformed Hinduism for annihilation of caste-based exploitation.

Mainstream History has greatly neglected the role played by women in shaping history. Creation and dissemination of the 'knowledge of past' was a prerogative of men. The exclusion of women from the domain of history reinforced the gender stereotype by portraying women as passive through the ages. Women's studies in the long run has emerged as an independent yet interdisciplinary branch of study from last four decades and have further developed with various nomenclatures such as 'Women's History', 'Gender History' and 'Gender Studies.'

Literature is deeply implanted in the wider socio-cultural contexts prevalent in its time which in turn reflects the social ethos of its period. An attempt has been made by me in my paper to analyse the writings of Vibhavari Shirurkar and reconstruct the feminist thought reflected

in her writings. I have taken a review of the social realities pertaining to women in Maharashtra in the earlier part of my paper. I have argued that Vibhavari's feminist thought expressed in her various literary forms is grounded in those realities. I have demonstrated that her feminist thought showed striking similarities to the thoughts expressed in the various trends in feminism in the West more or less in the same period. I have called Vibhavari as the harbinger of the second wave feminist movement in Maharashtra as the feminist movement in India in post-75 decades reverberated the same issues taken up in her literature.

The history of Modern Maharashtra in the earliest stage seemed to have focussed on few doyens as makers of modern Maharashtra confirming the dictum all history as the biography of great men. Similarly, it concentrated more on 'Bombay Presidency' leaving other Marathi speaking regions of the later formed Maharashtra state ignored. But it is a welcoming sign that in last few decades, ample historical research has been produced on various unexplored regions such as Vidarbha, Konkan and Marathwada reducing the 'regional imbalance' to some extent. Correspondingly, in the wake of the new trends such as Marxist interpretation of history, Annals, local history, gender history and many other facilitating interdisciplinary studies, the vista of research on Modern Maharashtra has widened in an unprecedented manner by bringing the social history and people's history at the centre of historical inquiry. Almost all the articles in this volume are in tune with these new trends that throw light either on a personality or different facets of human life that directly or indirectly contributed in the shaping of Modernity in Maharashtra and India.

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History, Gender and Vibhavari Shirurkar's Writings

Jaswandi Wamburkar

Women's history in last few decades has emerged as a significant trend in history writing in India. Researchers have produced important and interesting works on various facets of women's history in Maharashtra. Scholars such as Jashodhara Bagachi, Meera Kosambi, Tara Bhavalkar, Malavika Karlekar, Vidyut Bhagawat, Vinaya Khadapekar, Tanika Sarkar, Vijaya Ramswami and Judith Walsh have used women's writings in a very creative manner to reconstruct social history of Bengal, Maharashtra and South India. By making use of women's writings, researchers try to probe into women's past as conceived by them.¹ Many researchers have established that women do not live in the patriarchal framework passively but rather they resist and reshape the social reality in their day to day struggle. An attempt has been made in this paper to analyse the writings of Vibhavari Shirurkar (1905-2001) on the backdrop of the social realities pertaining to women in the twentieth century Maharashtra.

Literature as compared to the archival sources is now considered as an equally significant, authentic and credible source of history writing. Like history, literature also has the parameters of time, space, individual and society. History and literature are closely linked with each other.²

A historian's interest lies not only in understanding the past events but also in the thought processes behind the events. Literature is one of the seminal sources to comprehend the thoughts behind the action. It in a way is the 'psychological trace' of the past. Terry Eagleton has perceived literature as both a social force and a social product whereas Harry Lewin conceived literature not only as a product of the social causes but also as a cause of social effects.³ It is a significant tool of social change. It can be perceived as a statement on the social reality of its times.

Vibhavari Shirurkar was one of the foremost feminist writers in Maharashtra. Her feminist thought is very significant in the long tradition of feminist thought in India and Maharashtra. Balutai Khare was her maiden name and she became Malati Bedekar after getting married to well-known writer Vishram Bedekar. Nonetheless she is better known by her pen name Vibhavari Shirurkar.⁴ Therefore, she has been referred as Vibhavari Shirurkar in this article. She was a prolific writer and used various literary genres such as articles, stories, one-act play, drama, novel and research works. The relationship between the social realities pertaining to women of twentieth century and Vibhavari's writings is very significant. I do not claim that she discussed all the aspects of women's issues of those times in her writings. Nevertheless she was very conscious of their issues and she dealt with them in a very compassionate and sensitive manner.

Vibhavari's creative writings spanning across nearly half a century from 1927 to 1975 show a gradual development in her feminist thought. A thought does not germinate in a historical vacuum. It ripens out of the social realities a thinker encounters. Vibhavari all through her life was vigilant of the changes in women's lives and she conscientiously reflected upon them through her writings. It would be appropriate to discuss first in brief the social realities of the times concerning women to explore its relationship with the writings of Vibhavari.

Due to certain indigenous factors deeply embedded in the regional history of Maharashtra along with the advent of the British rule, Maharashtra started experiencing modernity in the various walks of life. The process of industrialisation and urbanisation followed by colonialism influenced the women of different strata in terms of class, caste and communities in a diverse fashion. Besides, in the changing scenario, the middle class woman became a 'lady of leisure' whereas the working class woman was compulsorily dragged into both the fronts

- home and work. As a consequence of the women's reform movement and experiments in women's education, a few middle class women from various communities and castes entered the public domain after 1880 and also began to actively participate into the women's reform movement.

The ideas and ideologies of Mahatma Phule, Gopal Ganesh Agarkar, Karl Marx, Sigmund Freud, Mahatma Gandhi, Bertrand Russell and Babasaheb Ambedkar had a deep impact on the thinkers of Maharashtra who began to reconstruct thought on women's issues in a more matured way in the first three decades of the twentieth century.⁵ More and more women came forward and began to show their talents in various fields such as education, journalism, arts, sports, medicine, theatre, social activism and politics. Women initiated joining associations and clubs meant for them on large scale. Many women's organizations⁶ sprang up on local as well as national levels and women started to define their interests, priorities in a more systematic manner. They participated in the social as well as the political movements led by Mahatma Gandhi and Dr. Babasaheb Ambedkar.⁷ Women from the lower sections of the society were also active in the worker's movements as well as tribal movements directed by Godavari Parulekar.⁸

The rising political consciousness among women was evident in their relentless struggle for rights such as right to vote, right for abortion, ban on child marriage and polygamy and other legal rights.⁹ As a result, women received many civil and legal rights in the post-independence times prominent being the right to vote, property, abortion, divorce and adoption. Polygamy was legally prohibited. Women participated on large scale in Samyukta Maharashtra movement and Goa liberation movement.¹⁰ As a consequence of the growth in women's education, women entered various new fields in large numbers such as politics, literature, research, art and films to name a few and began to exhibit their talents to the world. A new class of 'working' woman came up. Nonetheless, many women-leaders active in politics since pre-independence times who had envisioned better prospects for women in the post-independent times were disillusioned to experience gender politics in all walks of life. They realized that women were still engulfed into the shackles of patriarchy and they could hardly enjoy freedom in a free nation. Growing economic needs forced them to work outside the home eventually leaving them juggling on both the fronts of home

and work which drained their energy. The growing discontent in various social groups namely peasants, workers and women led to the rise of the other radical movements along with the feminist movement in the seventies in India.¹¹ Women took up issues such as price-rise, black-marketing, unemployment and came on the streets and led demonstrations.¹² The peasant women in Dhulia district rebelled for getting famine-relief work.¹³

Several factors were responsible for the growing discontent among women of different strata. The remarkable transformation of these times was more of a mental and intellectual in nature rather than material. Though a sizable number of women enjoyed the fruits of freedom, the lives of majority women remained submerged in patriarchy. The middle class housewives who were contented in domestic sphere gradually started feeling empty and measurable. They realized that house work and childcare dragged them into a chain of meaningless tasks which did not give them any work-satisfaction and joy of creativity. Those women who entered public domain also gradually became conscious of the 'gender politics' in the patriarchal world. Women perceived the world with new perspectives. They began to think their relationship vis-a-vis the society, economy, family and religion. They apprehended that even after proving their abilities, they often received secondary treatment in the society as just being women. Though they crossed the thresholds of home, cooking and childcare was still considered as their responsibility. They had to act as 'superwomen' by doing the role play of wife, mother, cook, homemaker and breadwinner. Many women artists especially film actresses in their autobiographies very boldly and openly exposed the micro-politics in their private lives.¹⁴ Dalit women's autobiographies revealed the bitter realities of life worsened by the two-fold exploitation of the caste system and patriarchy.¹⁵ They revealed their persistent struggle to fulfil the primary needs of life such as food, shelter and clothing. In nutshell, women in all strata became more and more distressed to see that position of men was more advantageous than women in both private as well as public life. Out of this sheer dissatisfaction, arose the feminist consciousness which gave rise to the feminist movement of 1975.

Vibhavari Shirurkar was vigilant of all these changes taking place in women's lives around her. A gradual evolution in her thoughts is visible in her writings. When the word feminism was not familiar either in

Maharashtra or India, Vibhavari showed deep feminist fervour through her writings. An attempt has been made in the following pages to discuss Vibhavari's writings and the feminist thought reflected in them.

It was Vibhavari's earnest desire to establish women as 'equal humans' to men in a society wherein women were reduced to sub-human status. Vibhavari not just lamented upon women's issues; but also made a very fundamental analysis of their subordination by way of developing a sociological critic of women's issues. She was sensitive to the issues of women of all strata. She firmly believed in man-woman equality. She alleged that woman was an essential part of a society and she should be able to venture into all walks of life along with men with equal potential. She envisaged that patriarchy was all-encompassing and it should be removed from all spheres of life such as law, family, marriage, education, religion, philosophy, economy, literature and language etc.

Vibhavari was of the opinion that women should be faithful to their experiences while writing about themselves. 'Unless bled, I didn't write,' used to be her stance.¹⁶ Vibhavari never perceived literature as an instrument of entertainment alone. When many popular writers such as N. S. Phadke and V. S. Khandekar were contented in painting the fanciful romantic stories, Vibhavari and few other women writers began to make serious deliberations on women's issues.

Vibhavari was brought up with utmost care and love by her father, popularly known as *Kharemastar*, a very liberal minded figure.¹⁷ Vibhavari in her early age was deeply influenced by the feminist thought of Gopal Ganesh Agarkar and also by the incredible service offered by Dhondo Keshav Karve for women's education. She was equally fascinated by the Gandhian thought as well as the socialist thought. Her writings in the initial stage seemed to have bloomed out of these theoretical underpinnings. Her writings in the first stage comprised of a treatise on legal reforms for women and her famous literary works *Kalyanche Nishvas* (1933), *Hindolyavar* (1934), *Viralele Swapna* (1935), *Bali* (1949) and few lesser known plays. The national movement as well as the women's movement were in full swing in the period from 1927 to 1950. Vibhavari championed the cause of women's rights through her writings in these times.

Vibhavari brought out a scathing criticism of the Hindu legal system which for her was the root cause of the declining status of Indian women from ancient times. Her two works co-authored with K. N. Kelkar alleged

that the Indian women were reduced to the most insignificant position by depriving her of all economic as well as legal rights.¹⁸ These works also lambasted the British legal system for further decaying the legal status of women in India. The authors firmly championed the legal rights of Hindu women in terms of marriage, divorce, adoption and inheritance. The two works came out as staunch feminist critique of the Indian legal system. The legal reforms advocated by them were also demanded later by Dr. Babasaheb Ambedkar in the Hindu Code Bill. Eventually Hindu women received many of these legal rights in the post-independent times. Nonetheless, it was an outcome of the unceasing efforts of the feminist movement in India of those times and of the staunch supporter of women's rights - Dr. Babasaheb Ambedkar. In that sense, Vibhavari proved as a farsighted thinker.

Vibhavari and Mr. Kelkar methodically put forth that the changes brought in by the British rule in the Indian legal system were disastrous. British understanding of the judicial system in India was superficial and faulty. The British rulers undermined the importance of customs which since ages had remained the basis of Hindu laws. The two authors claimed that the British rulers brought some insignificant legal texts such as *Dattakmimansa* and *Dattakchandrika* to prominence. They ascertained that the Hindu judicial system in India was not based on one legal text in pre-British times. Rather, there was plurality in the laws in India in terms of locality, region and caste. The many traditions received a serious setback after the advent of the British rule. That India had same laws in the entire country in the pre-British times was a colonial myth. Vibhavari and Mr. Kelkar firmly challenged the British construct of a monolithic 'Hindu' judicial system.

It was a very commonly accepted notion till 1980s among the intellectuals in India that British rule was instrumental in bringing positive changes in the lives of Indian women by way of bringing few legal reforms. The post-colonial critique of the British rule in terms of legal reforms has sprung up in the last two decades of the twentieth century.¹⁹ Nonetheless, Vibhavari and Mr. Kelkar expressed the limitations and lacunae in the judicial system initiated by the British rulers in India in a very clear cut manner in the third decade of the twentieth century and hence, their critique is certainly very novel, bold and significant.

Mahatma Phule and Gopal Ganesh Agravakar made a very significant contribution in theorising women's issues in the 19th century Maharashtra.

Its resonance could be seen in various spheres of life including literature. Many reformers in Maharashtra began to use literature as a powerful tool to change the social psyche towards women. Hari Narayan Apte was the pioneer of this tradition in the nineteenth century. A new band of writers such as Vaman Malhar Joshi and Shridhar Vyanktesh Ketkar, P. Y. Deshpande and a few others came forward in the twentieth century. They championed the cause of women's rights. Nonetheless they portrayed women as secondary to men and envisioned educated women to be docile, self-sacrificing and tolerant as usual. The third decade of the twentieth century witnessed the rise of new women writers such as Girijabai Kelkar, Anandibai Shirke, Kamalabai Tilak, Kusumavati Deshpande, Malatibai Dandekar, Shantabai Nashikakar, Kamalabai Bambevale, Indirabai Sahastrabuddhye, Prema Kantak, Geeta Sane and Vibhavari Shirurkar on the horizon of Marathi literature. They began to express women's pleas and sufferings through their literature.²⁰ Conversely, all of them did not write from the feminist perspectives. Yet, the concerns and issues raised by most of them were far more genuine and realistic than the one expressed by the contemporary male-writers such as N. S. Phadke, V. S. Khandekar, P. Y. Deshpande and G. T. Madkholkar to name a few.²¹ Vibhavari proclaimed in one of her interviews that 'the men-writers had not understood the 'real woman' which prompted her to undertake writings on women.'²²

Vibhavari's first fictional work *Kalyanche Nishwas*²³ (1933) was the most influential and controversial of all her works. It addressed the issues of the young girls and their sexual yearnings. Vibhavari was pioneer in using psychoanalysis as a technique in writing short-story. She gave away with the old technique developed by N. S. Phadke, the popular writer of those times. As she wrote the narratives in the autobiographical fashion i.e. in first person singular, she could vividly describe the rebellious thoughts in the minds of the young women. It was for the first time that the bodily experiences of women of love were revealed so openly in the modern Marathi literature. Both her literary works *Kalyanche Nishwas* and the novel *Hindolyavar*²⁴ (1934) demonstrated that both men and women were human beings and therefore, they both experienced similar emotional as well as physical needs. She championed the cause of women's sexual and economic rights. The intellectuals in Maharashtra were accustomed with the writings of Fredrick Engels, Sigmund Freud, Havelock Ellis, Margaret Sanger and Bertrand Russell in the first half of

the twentieth century. Nonetheless the image of woman as an 'asexual innocent idol' was dominant in the contemporary Marathi literature. Vibhavari became deviant by portraying women as 'human' as men and she had to pay a heavy price of it by the incurred harsh criticism. Vibhavari through her masterpieces brought the issue of sexuality of adolescent and single women to the forefront. For her, woman was not idol of virtues; rather she also had the right to make big as well as minor decisions of her life. Moreover, she had the right to make mistakes. Very few of the twentieth century women-writers exposed the inner feelings of women as candidly as Vibhavari did. Her female characters were rarely painted as fragile, docile, subservient wives, self-sacrificing, idle dolls or seductress. Women in literature emerged as confident figures who led their lives with vigilance. Vibhavari has narrated the pain of the women caused by the realization of the double standards in the society about sexual behaviour. Her literature stirred a debate on various issues of women initiated in various forms such as letters, articles, rejoinders and meetings. These were compiled and published in a book form called as *Vibhavariche Tikakar*²⁵ in 1949. The churning of ideas evidently brought out that the socially accepted image of woman was spurious and the psyche towards women needed to be reformed. This perhaps was the real success of her writings. Vibhavari, in that sense was not narrating only the social reality; rather she deployed literature as a tool to change the social psyche towards women. Thus, Vibhavari proved rebellious both ways – by rejecting the conventional forms of literature and by adding new content into it.

Vibhavari's novel *Bali* (1950) portrayed the agonies and pains of the nomadic tribes such as *Mang-Garudi*, *Paradhi*, *Kaikadi*.²⁶ She brought to the fore the problems of the most deprived castes in the subaltern groups. This is considered as her ground-breaking work since it was published when Dalit literature had yet to arise on the scene of Marathi literature. It was a stroke of genius which gave scathing critique of Indian democracy wherein she depicted the exploitation of the nomadic tribes whose living was more miserable than that of the Dalits in the capitalist world. She proclaimed that unless the nomadic tribes labelled as criminal tribes were made free from the clutches of untouchability, caste system, the exploitative capitalist system and beurocracy; unless they received equal opportunities of education and enough means of livelihood to bring themselves in the mainstream of Indian society and unless they got

the equal prestige and dignity of independent citizens, India would not truly be called as an independent nation. Aaba was a central character in 'Bali'; nonetheless, the novel also depicted the miseries of the women in the nomadic tribes. Vibhavari illustrated that the miseries and struggle of the nomadic women was different and far more severe than those of the middle class women. This novel brought out sharply Vibhavari's understanding about the nexus between caste and sexuality of women.

Vibhavari received ample recognition for her creative literature; nevertheless her journalistic writings were not equally known. She has more than 55 articles to her credit and most of them focus on the various contemporary women's issues. She firmly believed that inequality among men and women was not ahistorical; it had originated in a specific historical context. She affirmed that women became secondary in the society after men took over the ownership of the means of production. She therefore, opined that women should be part of the production system once again to end their age-old slavery.²⁷ She affirmed that middle class woman had become mere domestic slave and reproducer in the capitalist society whereas the working class woman had no choice but to tussle on both fronts - private as well as public. She suggested that India should adopt the model of Russia for the active participation of women in the public sphere. She appreciated the efforts of the Communist government to socialise housework by building a network of nurseries, kindergartens, soup kitchens and public laundries and thereby liberating women from the drudgery of cooking, child care and washing clothes. She was a critic of the women's organizations in India which in her opinion were not working hard for the betterment of women. She suggested they should make efforts towards introducing kindergartens and day care centres throughout the country. She had understood that women as a class had some common interests; nonetheless, the interests of women of elite, middle class and labour class were different and sometimes, contradictory. Though she primarily deliberated on the issues of middle class women, her writings showed deep concern for the working class women as well as men. She was aware that the domestic servants namely *Ramagadi* toiling in the middle class families with fixed working hours were the landless labourers forced to migrate in the urban centres such as Mumbai and Pune due to the new land revenue settlements.²⁸ She was watchful of the changing scenario during war times which gave them some new job opportunities. She welcomed

the growing consciousness among them who raised demands for weekly holiday during the Second World War.

Vibhavari's writings in the second phase i.e. from 1951 to 1968 show the disillusionments faced by her in her personal life as well as in the political and social life in India at large. She experienced the narrow chauvinistic attitude towards women in both personal as well as public life. Her writings were shaped by the revelation of the disappointments and frustrations in women's lives as a housewife and mother. The post-independent writers gave a quasi-projection as if women's problems no longer existed in India. Vibhavari projected the realities in a different manner.

Vibhavari firmly believed in man-woman equality. Nonetheless, she was constantly distressed to see the differential treatment given to her and other women in the society. She married at the age of thirty-eight with Vishram Bedekar, a well-known writer and intellectual. It was a love-marriage and yet she faced some problems. Vibhavari enjoyed his intellectual company, but he was a male chauvinist which shattered her dream of man-woman equality in her personal life.²⁹ What she experienced in her personal life, was a bitter reality perceived by her for the majority of women around her. The marital relationship between Vibhavari and Vishram Bedekar was quite stressful for few years due to his extra marital affair.³⁰ Vibhavari realized that even after being educated, cooking and childcare became the destiny of women and how the emancipatory project of the independent state could not fulfil its dream of the liberation of women. Vibhavari expressed the discontent, agony and frustration in the minds of the middle class woman in the long-story *Doghanche Vishva* (1957)³¹ and the novel *Shabari* (1962)³² in a very sensitive manner. She made a critic of the nature of housework which did not allow the housewife to perform any work for a long time. She also expressed the power-politics that operated at micro-level in the conjugal relationship. She made a graphic description of the power play between husband and wife that a woman experienced in her day to day life through the central characters of Chitra and Shabari in these literary works. Their lives represented their journey towards their political consciousness. Vibhavari's writings manifested the insights reflected in liberal feminism at this juncture. She never believed in the conventional sexual division of labour which in her opinion was oppressive not to just women but to men also. Therefore, she suggested that women should

go out of the house and search for their own identity. Abhiram, the hero of the novel *Shabari* represented the middle class relegated from the motivational activism of the national movement towards self-centred, materialist consumerism. Vibhavari showed the degraded position of housewife in the capitalist society. Her other novels such as *Jai* (1952) and *Uma* (1966) revealed that the family structures in India had not become sufficiently democratic to give equal status to women vis-à-vis men.³³ Her heroines such as Jai, Chitra, Shabari and Uma did not bend in front of the patriarchal structure; they constantly raised issues and sought to find space within the structure. The novel 'Jai' brought the women's issues in *Sonar* (Goldsmith) caste whereas the other novel such as 'Bali' brought out the problems of survival of women in the nomadic tribes. Vibhavari in her writings has made a graphic description of the differential patriarchies in various castes leading to the diversity in the nature of issues of women therein. Her writings also brought out bluntly that the modernity had influenced various communities differently.

Vibhavari made a sociological study of the various women's organizations meant for the destitute women across Maharashtra and she came up with several deductions about the social realities pertaining to women in India. She made a strong appraisal of the emancipatory movement for women which in her opinion could not liberate them sufficiently to take care of themselves.³⁴ She demonstrated that women's lives became miserable if the man-woman relationship was not grounded on strong base. Most of the women admitted in those various organizations were found unsafe in the personal domains. Some of them were sexually harassed by their own distant family members such as uncle, brother-in-law or in remote cases by their own father while a few others were left with no choice but to join an orphanage as they were deserted by their husband and other family members. She found that married women outnumbered the widows or minor girls in the orphanages. Another finding was that the percentage of women in orphanages coming from urban areas was more than those from the rural areas. The very title of her book *Gharala Mukalelya Striya (Women deprived of homes)* signifies her sympathetic attitude towards women. Vibhavari refrained herself from using the conventional parameters such as 'immoral' for the girls or women in terms of their sexual behaviour. She has illustrated that women did not tend to be of bad character as otherwise projected but rather the conditions forced them to follow

illicit practices. Most of her post-independent writings engaged in the gender politics in the private domain of life.

Vibhavari realized at this juncture that the psyche towards women needed to be transformed in order to achieve gender equality in all walks of life. She recognised that reform in the family values was required as it was through family that one received the preliminary lessons of gender constructions. She wrote a series of articles in the popular magazine *Kirloskar* which later came in the form of a book with the title *Manaswiniche Chintan* (1969).³⁵ The book denotes the third phase of her writings in which her feminist thought has come up in the most full-grown form. The ideas put forth in this work resemble to the findings of the post-sixty second wave feminist thought in the West in an unprecedented way. Though the articles have been written in a lyrical style, the content is very serious and unwaveringly feminist. The entire account is narrated through the lens of a middle class mother of two children and her comparative study of two generations regarding the processes of gender constructions therein on the backdrop of the twentieth century. In a way, Vibhavari revealed in this work the new knowledge – the ‘feminist knowledge’ that she had acquired. Vibhavari firmly believed that all societies on the earth were patriarchal with man-woman inequality being its basis. She put forth steadfastly that gender was not natural but a social construct and it got formed and reinforced through various institutions such as family, schools, religion and even mythological texts. She was also critical of the ways in which attempts to construct typical ‘feminine’ females and ‘masculine’ males were made in Indian society. Girls of her generation were supposed to be docile, tolerant, timid and ready to take up domestic chores whereas boys were supposed to be aggressive, bold, breadwinners and confident. On the contrary, she suggested that girls and boys should be nurtured in the same value structure to achieve gender equality. Another significant deliberation of Vibhavari was on sexuality which according to her was also a social construct. She persistently indicated that in patriarchal society, women’s sexuality was constructed to serve men’s needs and interests. She was aware that myths and sacred texts in ancient times also played a significant role in shaping stereotypical image of woman as a ‘seductress or obstacle for men in their path towards salvation’. She pointed out that women’s body in modern times had become commodified in the capitalist world. It was painful for her

to see women beautifying their bodies to attract men with a number of cosmetics. She opined that biologically women were weaker than men and hence they required protection which could be gained by getting married. Nonetheless, this argument brings her in the trap of considering 'anatomy as destiny.' Similarly, it also implied that women had to permanently depend upon men for safety. Vibhavari was critical of those women who used their body to serve their own interests. Though she championed the cause of women's sexual rights, she disapproved adultery in marital relationship. She addressed the issue of housework and made a fundamental criticism of it. She opined that the housewives in the capitalist world were caught in the mechanical work of cooking, cleaning and childcare which was never ending and devoid of any mental satisfaction leaving them frustrated and dejected. Those women, who entered public life, had to share the double burden of work. Vibhavari made women alert that they should shirk away this burden of work forced upon them by the patriarchal assumptions.

Moreover, Vibhavari came up with more fundamental analysis of motherhood. She tried to show the linkages between the caste system and the patriarchal system. She alleged that motherhood was always glorified as the society required human labour in the agricultural economy. She markedly pointed out that all types of motherhood were never celebrated in the society; rather motherhood born out of marital relationship alone was acceptable within the patriarchal set up which considered the progeny born out extra-marital relationship as illegal. She reasoned out how men's control over woman's sexuality as well as on her reproductive capacity was rooted in the prerequisite of the patriarchal society to gain legitimate heir to the property and to retain the purity of the caste. Vibhavari at this juncture made an attempt to show the nexus between caste system and patriarchy but regrettably she did not elaborate it further. She affirmed that motherhood was not at all a creative process and rather it was a myth created and reinforced by the patriarchal society over the years.

Vibhavari made a sharp critique of patriarchy but she did not reject it altogether and rather suggested measures to reform it. She supposed that women were prone to be sexually exploited owing to their physical weakness and therefore, both men and women should be given education to control their sexual vigour. What she meant by sex education was learning self-control in matters of sexual behaviour

and not just a technique or science of doing sex. She underlined the importance of family and marriage which could ensure safety to women. She emphasized the need to reform home to bring about man-woman equality. Though she pointed out that women needed protection from men from any potential sexual assault, she considered men alone to be her protector. She envisaged a society with meaningful and peaceful co-existence between men and women. She was aware of the issues of rising number of single mothers and problem of childrearing in the West caused by the free sexual relationships. She always expressed the need to consider the issues of children while deliberating on human rights of men and women. Hers was the manifestation of Indian feminist thought that was deeply implanted in the social realities in India.

Conclusion

Vibhavari's writings showed striking similarities to the thoughts expressed in the Marxist, Existentialist, Radical and Socialist feminists in the West more or less in the same period. Nevertheless, her writings have not emanated from the Western Feminist thought. They have sprouted out of the realities relating to women in India. Each age is characterized by its social ethos. Women across the world experience the same realities in their countries with minor degree of variations during the same period. The feminist thought shaped in various parts of the world grew out of those realities. When the second wave feminism became evident, a new ethos was shaping the world. The similarity between the feminist thought of Vibhavari and the feminist thought in the West was due to the fact that their core principles were identical. Nonetheless, Vibhavari's writings manifested Indian feminism.

Except for few short stories and the novel *Bali*, Vibhavari in her literature predominantly dealt with the issues and agony of the middle class women. She did aspire to deal with the issues of women in society at large. Precisely with the same motive, she left the job of teacher at Hingne Stri-Shikshan Sanstha. She worked for a few years with Shripad Mahadeo Mate in his work towards the removal of untouchability in Pune. Later for a few years she also worked in the colonies of the so-called criminal tribes at Solapur. In that sense, she crossed the boundaries of middle class to a certain degree. Nonetheless, she faced restrictions after getting married with Vishram Bedekar. She was a well-known orator. But eventually she started refusing some invitations of public lectures.

These were not just her personal limitations, but rather the limitations of those times. Being a middle class woman, she had to take care of the household duties and the growing child as well. The middle class living in those times had become very saturated. Women were supposed to take care of house and childcare. Despite being an ardent feminist, Vibhavari could not fully get rid of that psyche. She was aware that her literature could not reflect the life-experiences beyond the middle class of those times. She realized the constraints of middle class life in India and she depicted them in her literature. She developed a feminist critique of it which was different from the feminist analysis in the Western world.

She had attraction of Gandhism and Communism, but she never became active in either of the movements. She built characters influenced by the Marxist thought in the novels, *Viralele Swapna*, *Bali* and also the long-story *Doghanche Vishwa*. Nonetheless, she never followed any of the ideology in her own life. After her visit to Russia in 1950, she was disillusioned by the experiment of Socialism in Russia. Freedom was the quintessential of her social thought. Therefore, progressively she felt that democracy was better than communism. Vibhavari always proved rebellious by expressing societal issues, double standards in the society, injustice caused to various social groups. Nonetheless at times, she hid behind the penname to protect herself from the probable attacks and criticism. It showed the vulnerability of her times.

The issues that Vibhavari championed in her literature were taken up in the vibrant feminist movement in the post-seventy decades in Maharashtra. Veteran feminist activist Pushpa Bhawe has expressed the regret over the failure of the feminist movement in initiating a dialogue with Vibhavari in those times.³⁶ Vibhavari did participate in few social programmes after 1970. In 1975, emergency was imposed in India which affected the artists, writers and thinkers also. Vibhavari was selected as the president of the parallel literary meet in 1981. In her presidential address, she strongly voiced the writers' right of freedom of expression; she condemned those who wrote in pro-government tone and were showered with various titles and honours whereas the critics were victimised by the government.³⁷ She referred in her lecture to the play *Rhinoceros* (1959) authored by the French dramatist Eugene Ionesco who depicted the metamorphosis of the citizens eventually into rhinoceroses in Hitler's reign. She alleged that citizens in India also were transforming into the 'tame' animals submitting themselves to the

authority. The fiery speech and upfront position taken by her at the age of 80 reveals the radicalism of her character.

It is a moot question among many critics as to why Vibhavari stopped writing after 1970 onwards especially when she lived a long life of 96 years till 2001. Apart from writing the biography of her own father, she does not have any independent work to her credit in these 31 years. *Kharemaster* is however, a brilliant work written by Vibhavari at the age of 88. Generally the pace of writing of any writer ceases at the age of sixty. Vibhavari deeply believed that her husband Vishram Bedekar was a better writer than her. Bedekar used to be the first reader of all her writings. She never used to publish any writings disapproved by Bedekar. Ramdas Bhatkal became a close friend of Bedekar couple during their stay in Mumbai. His long article³⁸ throws light on their relationship in the second half of their life. It also explores their complex relationship with H. V. Mote and Krishnabai Mote. Later, Vijay Kuvalekar also became a close family friend of Bedekar couple in late nineties.³⁹ He used to visit them frequently. Both Ramdas Bhatkal and Vijay Kuvalekar had narrated in their articles that Vibhavari wanted to publish her autobiography, but Bedekar always discouraged her from doing so. Vijay Kuvalekar has opined that the rebel in her eventually receded owing to him.⁴⁰ She eventually withdrew herself from writing as well as from public life. It was her limitation as an individual. But it equally symbolised the tragedy of the women's lives in those times.

Despite these limitations, Vibhavari's literature is very significant not only in the history of Marathi literature but also of the Indian literature. She was one of the pioneers of the feminist literature in India. The second generation Marathi feminist writers such as Ambika Sarkar, Gauri Deshpande, Urmila Pawar, Saniya, Meghana Pethe, Priya Tendulkar, Pradnya Pawar and Neeraja has made a valuable contribution later to the canon of Marathi literature. Therefore, it won't be an exaggeration if Vibhavari is considered as the 'harbinger of the second wave feminist movement in Maharashtra.' The issues put forth by her were taken up on various platforms of the feminist movement developed in Maharashtra and India in post-75 decades. In that sense, Vibhavari proved to be a visionary.

Endnotes and References:

This article is based on my Ph.D. thesis entitled 'Realities Pertaining to Women in Maharashtra (1927-1975): A Case Study of Vibhavari Shirurkar's Writings from Historical Perspective' completed under the able guidance of Prof. S. M. alias Raja Dixit at Savitribai Phule Pune University, Pune in 2018.

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Published by
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A.P.H. Publishing Corporation
4435-36/7, Ansari Road, Darya Ganj,
New Delhi-110002
Phone: 011-23274050
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May 2020

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Changing Peer Group Composition and Learning Outcomes: An Experimental Study

Paranjape Swati and Dharankar Madhavi***

ABSTRACT

Peer-learning is effective in metacognition, social and skill learning. Studies on Peer-learning in health sciences use random group composition. Present study aimed to assess influence of change in group composition on learning outcomes.

This was two phase pre-post two group experimental study. Sampling was convenient; 37 fourth year physiotherapy students were included and randomly allocated in two groups. In phase 1, group one was sub-grouped based on scores of content knowledge test taken prior to experiment, ensuring high, low, medium scorers grouped together making subgroup means equal. Group two chose their own sub-group partners. In the second phase group one learners chose their partners and group two sub-grouped through equating the scores. Five case-based sessions were presented in each phase and both groups fulfilled the objectives by peer discussion. Learning outcomes were short term and long term case analytical ability by test scores.

Scores of short term case analytical ability were better in learner's choice group than equating group however they were not statistically

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significant. Learner's choice group was significantly effective than equating group for long term case analytical ability. Composition of groups influences the learning outcomes, playing an important role on the quality of learning.

Keyword: Peer-learning, Group Composition, Group Dynamics, Learner's Choice, Equating

INTRODUCTION

Health science education is competency based education. Students learn in variety of environments like clinical placements, laboratory and lecture based setting in an un-incidental or incidental way (Hennig et al., 2008). Peer learning (hereafter referred as PL) can be a component in any of these environments. PL provides interactive, reflective and self-directed learning environment where learners learn from and with each other (Falchicov, 2003). In health science education interpreting important data, diagnosis, choose best possible treatment options, decision making in real life situations is essential. Process of clinical decision is often intuitive; hence difficult to learn for a novice clinician or therapist (Frantz & Rowe, 2013). The common instructional approaches used in health science education are problem based or case based learning (hereafter referred as CBL) approach.

REVIEW OF RELATED LITERATURE

When literature search was done for present paper literature on PL took various terminologies like peer tutoring, collaborative learning, co-operative learning, near peer teaching and group learning. There is extensive discussion done by Falchikov (2003) focussing on design, delivery, and evaluation of peer-tutoring, and operating interactive factors, which was focus of this paper.

Topping (2005) have explored factors and variables affecting the study design and the learning outcome. Literature on CBL has elaborated on its implications and benefits. CBL uses cases to pose cognitive and learning related challenges to learners. Cases act as catalysts for class discussion and collaborative analysis. (Osinubi, 2014) Important characteristics of CBL are to hypothesize based on previous knowledge and present information to come to solve the case and to consolidate

and integrate the theoretical base with its clinical relevance improving analytical abilities (Williams, 2005).

REVIEW OF RELATED RESEARCHES

Majority of researches were favouring the PL and CBL in improving students' multi-faceted abilities and learning outcomes. Various aspects covered under PL and CBL are

- intrinsic motivation (Scagar et al. 2016)
- developing analytical and problem solving skills (Gade and Chari, 2013)
- understanding concepts and lateral thinking (Nair (2013)
- conflicts in collaborative learning can be challenging (Aranio et al., 2012)
- case discussion as sustainable and effective resource (Weidenbusch et al., 2019).

Thus there was consensus on effectiveness these approaches. However though group dynamics influenced by group design is not found to be addressed. Hence research question emerged was "whether change in peer group composition in PL strategy affects the analytical ability when used with case-based approach?" Hence the study titled "Changing Peer Group Composition and Learning Outcomes: an Experimental Study" was conducted in physiotherapy discipline.

RESEARCH OBJECTIVE

This study aimed to fulfill following objectives

- 4.1 To compare effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of short term case analytical ability
- 4.2 To compare effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of long term case analytical ability

HYPOTHESES

The null hypotheses to be tested were as follows

- 5.1 There is no difference in the effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of short term case analytical ability
- 5.2 There is no difference in the effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of long term case analytical ability

METHODOLOGY

The research methodology adapted was as follows

- 6.1 **Research Design:** This was quasi experimental two group pre-test post-test cross over study design. It was conducted in two phases.
- 6.2 **Population:** Physiotherapy education is a UGC approved discipline. Approximate population size is 1500 from 40 colleges of physiotherapy across State of Maharashtra
- 6.3 **Sample:** Participants from Physiotherapy department of Seth G S Medical College were included in the study by convenient sampling. Sample size was 40 however the repeater students were excluded from the study. Resultant 37 students were included in the study.
- 6.4 **Experimental Treatment:** Before the experiment began the content knowledge pre-test was taken. The students were randomly allocated in two groups A & B. Group A was sub-grouped on basis of pre-test score where high, medium and low scorers were grouped together ensuring mean score of all subgroups is equal. Group B was allowed to choose their sub-group partners. After 20 days of wash out period these groups crossed over. Group A, was allowed to choose their partners whereas Group B was sub-grouped on basis of equating scores. In each phase five case-based sessions were conducted where real life case scenarios were presented. Students were given the objectives to fulfill by peer group discussion. Free use of the resources like internet, books, and notes was allowed during discussions. After the sessions the related case-let was given to solve. The scores of this case-let analysis were recorded.
- 6.5 **Tools for Data Collection:** Outcome variables were short term and long term case analytical ability. For assessment of these variables

tool was developed by the researcher based on the content developed for the treatment. It was validated by the unbiased subject experts. It was estimate of the ability of the learner to analyze the presented case and establishing the correct diagnosis and treatment planning. It was assessed as

- 6.5.1 **Short term case analytical ability:** Done immediately after first session of each phase of experimental intervention.
- 6.5.2 **Long term case analytical ability:** Done at the end of last session of each phase post experimental intervention in terms of case-let analysis score.

Design and flow of participants through experiment is depicted in figure 1

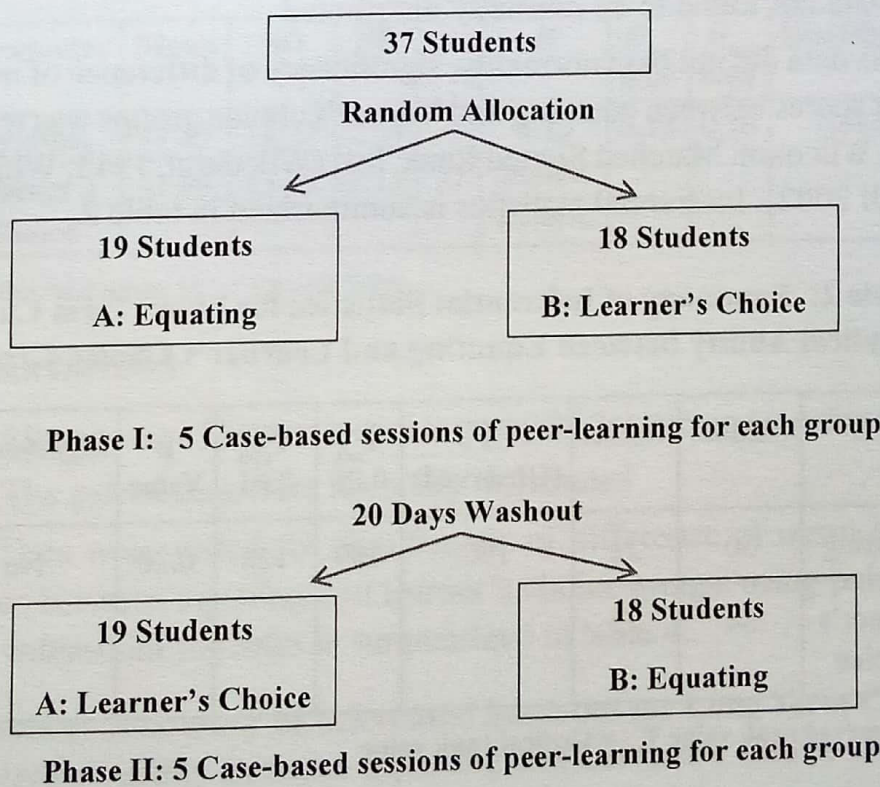


Figure 1: Design & flow of participants through experiment

DATA ANALYSIS & IMPORTANT FINDINGS

Short Term Case Analytical Ability

The data were subjected to normality testing using Kolmogorov Smirnov Test (KST) (Ghasemi & Zahediasl, 2012). The statistical analysis is summarised in the table 1.

Table 1: Statistical Analysis of Short term case Analytical Ability for Normality

Parameter	Mean	SD	SE	n	D	$D_{n,\alpha}$ 0.05	$D_{n,\alpha}$ 0.01	Distribution
Equating	27	12.84	2.11	37	0.21	0.14	0.16	Non Normal
Learner's choice	29.18	16.85	2.77	37	0.23			Non Normal

D= Observed value, $D_{n,\alpha}$ = Critical Value

Observations

- Mean test scores in learner's choice group were higher than the equating group
- Data not found to be normally distributed

As data did not pass normality, significance of difference of mean in test scores between equating and learner's choice groups was tested using Wilcoxon Matched Signed Rank Test (Wilcoxon, 1945; Whitley & Ball 2002). Inferential statistics is summarized in table 2.

Table 2: Summary of Inferential Statistics for Short Term Case Analytical Ability between Equating and Learner's Choice Groups

	Median	Ranks	T (Observed)	T_{crit} 0.05	T_{crit} 0.01	'p' Value	Significance
Equating	30	32	196	159	128	0.20	No
Learner's Choice	34	32					

T= Observed rank value T_{crit} = Critical rank value

Observations and interpretations

- Observed rank value is higher than critical rank value at 0.05 and 0.01
- The calculated 'p' value for significance of difference of mean between group is observed to be higher than the desired significance level ($p > 0.05$)

Findings

- Difference of mean in test scores for short term case analytical ability between equating and learner's choice groups is not found to be statistically significant.
- As the difference is not statistically significant the null hypothesis is retained.

Long Term Case Analytical Ability

The data were subjected to normality testing using KST (Ghasemi & Zahediasl, 2012). The statistical analysis is summarised in the table 3.

Table 3: Statistical Analysis of Long term Case Analytical Ability for Normality

Parameter	Mean	SD	SE	n	D	$D_{n,\alpha}$ 0.05	$D_{n,\alpha}$ 0.01	Distribution
Equating	27.27	14.27	2.34	37	0.12	0.14	0.16	Normal
Learner's Choice	31.86	13.12	2.15	37	paired sample			

D= Observed value, $D_{n,\alpha}$ = Critical Value

OBSERVATIONS

- Mean score of learner's choice group is higher than equating group
- The paired data were normally distributed

Data were tested for significance of difference of mean in test scores between equating and learner's choice groups using paired 't' test. Inferential statistics is summarized in table 4.

Table 4: Summary of Inferential Statistics for Long Term Case Analytical Ability Between Equating and Learner's Choice Groups

	Mean	df	't' Obs	Table value 0.05	Table Value 0.01	CI 95%	'p' Value	Significance
Equating	27.27	36	2.14	2.03	2.72	-08.94 to -0.24	0.03	Yes
Learner's Choice	31.86	36						

df= degrees of freedom, 't' obs= Observed 't' value, CI= Confidence Interval

Observations and interpretations

- Observed 't' is higher than critical 't' at 0.05
- The calculated 'p' value for significance of difference of mean between the groups is observed to be lower than the desired significance level ($p > 0.05$)

Findings

- Difference of mean in test scores for long term case analytical ability between equating and learner's choice groups is found to be statistically significant.
- As the difference is statistically significant the null hypothesis stands rejected.
- Grouping by learner's choice is found to be significantly better in improving the long term case analytical ability as compared to equating group.

DISCUSSION OF RESULTS

Short Term Case Analytical Ability

There was no significant difference in both the groups. Results support the previous research report which highlights aspect of peer acceptance in collaborative learning, associated with anxiety (Greco & Morris, 2005). Equating group in this study was heterogeneous in terms of group design. The peer partners were high, medium and low scorers grouped together. Though the peers were blinded about this fact, they not being close friends, there could have been the factor of social anxiety which may have affected the quality of group interaction among them. There have been reports where the heterogeneous group formation may not always benefit the learners. Present study results are consistent with these reports (Wing-yi Cheng et al., 2008). For the learners this group was perceived as asynchronous group. This could have led to limited social interaction, participation, exchange of ideas in the initial phases. There are studies where collaborative learning benefits low and medium scorers and high scorers shown to have decreased performance (Stockdale & Williams, 2004). However in this study results were not analysed by individual performance assessment but were for the group. Therefore individual differential achievements may have

reflected as low overall achievement. However the lack of evidence limits the endorsement of this fact in present study. In collaborative learning, context plays very important role. Interaction with others is a key factor in knowledge generation (Hill et al., 2009). Present study learner's choice group, there could have been good interaction and feeling of being in team that could have contributed to better test scores in this group. However probably this being the first ever experience of formally designed peer learning sessions, newness to experiment may have affected the quality of interaction between peers in the initial phases in both the groups. Therefore initial phases of experiment there could have been limited interaction; tendency to avoid the conflicts may have been the strategy in both the groups. This probably would have seen as no significant difference in both the groups in short term case analytical ability.

Long Term Case Analytical Ability

Learner's choice group was significantly better than equating group. Research shows that in collaboration learning, one can't ensure the knowledge generation just by providing environment (Hill et al., 2009). Extent of learning depends on quality of interaction (Scager et al., 2016). Scientists have identified perceived sense of being a community has a large influence on the social interaction (Hill et al., 2009). It is shaped by participation, receiving feedback from others (Hill et al., 2009). In learner's choice group, peer partners being friends, there could have been freer and open environment for group discussion. Friendship fosters learning as students use friendship to learn, they can ask anything when it comes to friendship (Roberts, 2009). The role of positive interdependence has been thought to be a crucial factor in collaborative learning (Johnson & Johnson, 2009) There is development of trust between the friendship groups which creates opportunities to explain, apply concepts and gain different perspectives (Senior & Howard, 2014). Present study results support these findings as learner's choice group performed better than equating group. Groups are dynamic social systems under influence of various contextual factors, where time spent together greatly influences the social interaction (Hommes et al., 2014). In present study also there was improvement in scores over the last sessions in both groups. Some research reports have reported that the friendship quantity and positive friendship quality does not always

serve protective function (Greco & Morris, 2005). Present study findings contrast this assumption as it showed significant improvement in long term case analytical ability in learner's choice group as compared to equating group. Present study endorses the influence of friendship on long term case analytical ability. Johnson and Johnson (2009) have also highlighted that the higher quality relationship plays important role where competitive efforts versus cooperative efforts of the group influence the outcome.

CONCLUSION AND LIMITATIONS

Present study results conclude that composition of groups significantly influences the group dynamics. Changing group composition influences the quality of learning outcome. When students chose their partners they performed better in case analytical ability, than when in equating group. However these results may not be generalized for the different content, domain and disciplines.

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ACKNOWLEDGEMENT

- We whole heartedly thank subject experts Dr Gauri Hardikar, Dr Jyoti Bawane,
- Dr Sanjivani Mahale, Dr Swati Kale (PT), Dr Pradnya Gadkari (PT), Dr Jaimala Shetye (PT) for their valuable contribution in validating the tools developed for this work.

MobileNet architecture and its application to computer vision

Author(s): Rupa Patel¹ and Anita Chaware¹

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Book DOI: 10.1049/PBPC042E

Chapter DOI: 10.1049/PBPC042E_ch

ISBN: 9781839533235

e-ISBN: 9781839533242

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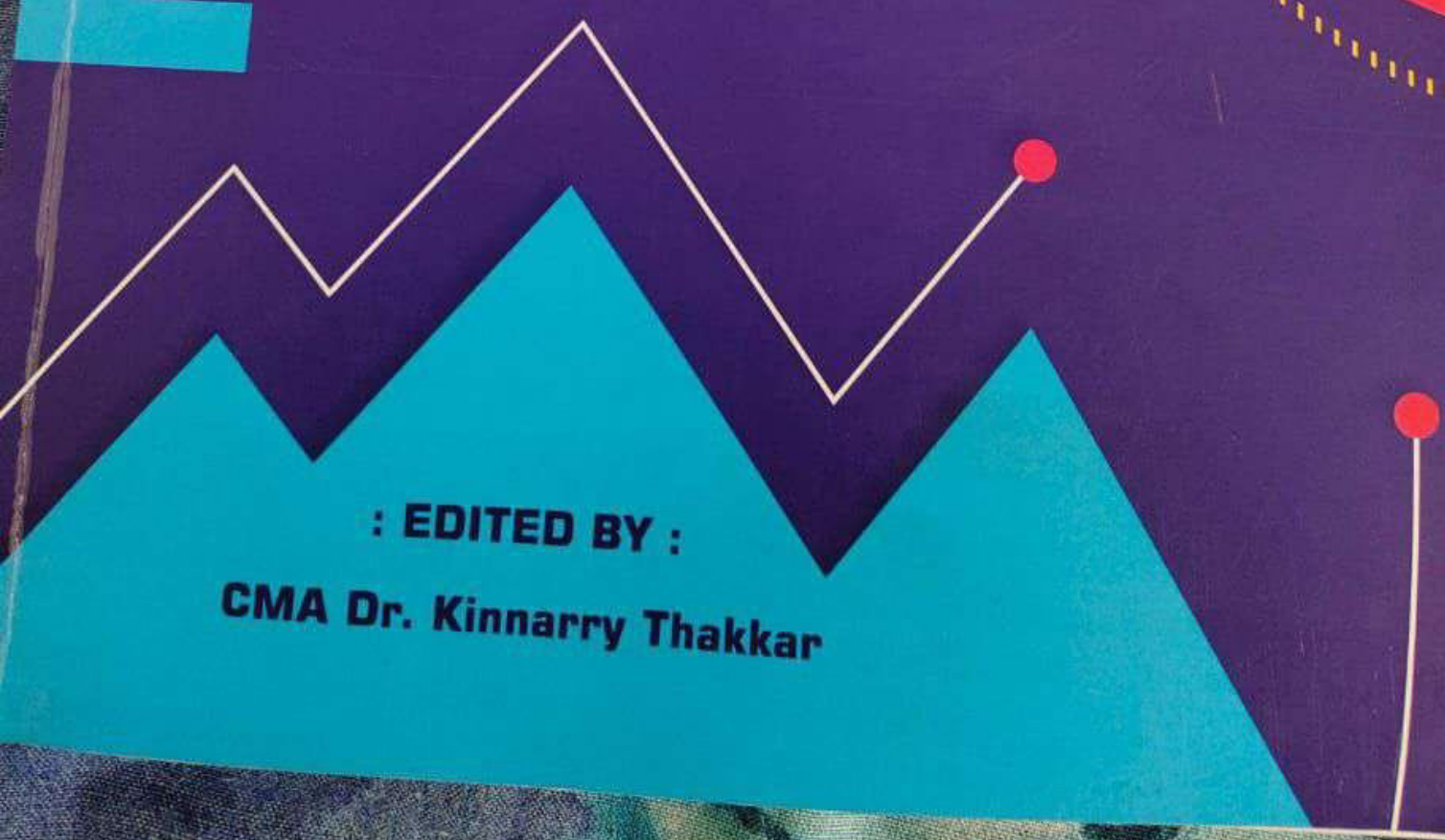


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परिवर्तनवादी साहित्य

संकल्पना आणि स्वरूप

संपादक
डॉ. रामकिशन दहिफळे

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डॉ. वासुदेव मुलाटे गौरव ग्रंथ

ISBN No. : 978-81-949714-8-1

सर्व हक्क : प्रकाशकाधीन

**Pariwartanwadi Sahitya :
Sankalpana Aani Swaroop.**

Editor : Dr. Ramkishan Dahiphale.

मुद्रक : रुद्रायणी ऑफसेट
सिडको, औरंगाबाद.

भ्रमणध्वनी : ९५४५४९५३६४

परिवर्तनवादी साहित्य :
संकल्पना आणि स्वरूप
संपादक : डॉ. रामकिशन दहिफळे

अक्षर जुळवणी : नीट एंटरप्रायजेस,
१४, राठी गॅलेक्सी, सिडको कॅनॉट,
औरंगाबाद. भ्रमणध्वनी : ८७८८४७५२०८

प्रकाशक :

सौ. राजश्री मुलाटे पांगरकर,
स्वरूप प्रकाशन,
५९२, नारायणपेठ, शिवशक्ती अपार्टमेंट,
केळकर रोड, कन्या शाळेजवळ,
पुणे-४११०३०
भ्रमणध्वनी : ७०२०२६३७०७

मुखपृष्ठ : सरदार जाधव

आवृत्ती : पहिली
वसुबारस १ नोव्हेंबर २०२१

मूल्य : ६०० रुपये

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Library, Information & Knowledge Services for Education 2020

**Edited by
Dr. Shakuntala S. Nighot**



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A.P.H. PUBLISHING CORPORATION

**4435-36/7, ANSARI ROAD, DARYA GANJ,
NEW DELHI-110002**



Published by

S.B. Nangia

A.P.H. Publishing Corporation 4435–
36/7, Ansari Road, Darya Ganj, New
Delhi-110002

Phone: 011–23274050

e-mail: aphbooks@gmail.com

May 2020

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Note:

Typeset by

Ideal Publishing Solutions

C-90, J.D. Cambridge School,
West Vinod Nagar, Delhi-110092



Printed at

BALAJI OFFSET

Navin Shahdara, Delhi-110032



FOREWORD

“Google can bring you back 100,000 answers, a librarian can bring you back the right one.”

Neil Gaiman

The digital world has changed the way we survive. Today, every walk of life is touched by the mark of digitalization. It has brought about a far-reaching transformation in the working of contemporary libraries. In fact, the digital era has been the moral fiber of the progress in Information and Communication Technology. The techno - savvy activities and services have enabled the library personnel and libraries to move along with the times. The libraries of the present and future have to gratify the necessities of the users of Google generation and more recently the millennial generation

So then what is the role of Library 2020 and Librarians 2020? In the year 2020 just like whole education society, librarianship 2020 has also taken a great leap so as to reform the libraries today as Gen Next libraries.

In terms of librarianship then, what are the traits that a scholastic librarian today, should possess to be thriving in their profession and in serving their users?

Benjamin Franklin is an incomparable role model for librarians. According to him, there is a proposed list of virtues for the Gen Next Librarians. These virtues can be used as a tool to guide librarians for self-improvement in the 21st century, though they aren't limited to that purpose.

21st century librarians they need to be focused. **Passion is the soul of the Techno – Savvy Librarians. They** understand the creative

process and engage it to solve problems of screen-agers. They have a plethora of skills and ideas to share with their colleagues. They need to be curious i.e. to **be comfortable not having the answers, but strongly desire to find them.** In this digital world of knowledge they should not be too serious but as the saying goes “**Let my playing be my learning, and my learning be my playing.**” These are virtues that are hopefully widely shared across the profession. These should serve as a guide for development as skilled personnel.

Librarians are the backbone of all institutions. In today’s world they need to keep themselves abreast of the happenings in the digital world. Hence, **all digital librarians should have thorough knowledge of the apps and the various online resources.** The college library will always be an essential trait mark of higher learning, on condition that the study resources students need and the place to peruse them. But the future is digital, and iPads are a great way to link the gap between traditional libraries and the developing world of e-reading.

Librarians in the 21st century need to be vibrant and booming. They can enthuse persons but can also be used across the library community as a model for distinction in librarianship. Librarians in the present day and in the future will persistently need to be re-tooling and reinventing themselves. And motivating themselves for enhancement is the approach that portrays a Gen Next Librarian.

Dr. Sr. Tanuja Waghmare

ACKNOWLEDGEMENT

We extend our heartfelt gratitude and appreciation to all those who contributed towards producing this intellectual work. This book contains the papers contributed to national webinar Education Gen Next: Perspectives, Opportunities and Challenges, which has been a grand success with 3667 registered participants from more than 7 countries and almost from all states of India. To the delegates who participated, your presence was valuable to us! This overwhelming response and success was a result of cooperation, efforts and inputs received from many people.

We owe our gratitude to our management for constant support and encouragement we receive for any such academic endeavor.

We are thankful to our distinguished resource persons of the webinar for sharing their wealth of knowledge and expertise at various expert sessions as listed below.

Dr. Jayashree Shinde

Director, TLC, Dept. of Educational Technology, SNDT Women's University, Mumbai

Keynote Address: Education GenNext: Why and How?

Mr. Viral Dedhia

Founder, Director, EdFly Learn

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Expert Session 1: Effective Use of Technology Tools in Academics

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Expert Session 1: Enhancing Visibility of Researchers through Academic Social Platforms

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Expert Session 3: Paradoxical Betweenness in Academic Endeavours and Research Metrics

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Expert Session 4: Citation Management to Avoid Blame of Plagiarism: A practical Session

Dr. Indu Garg

Former Head of Dept. of Education, University of Mumbai

Valedictory Address

We are indebted to our sponsors Union Bank of India Santacruz west Branch, Bank of Maharashtra Khar Road Branch, Vidyaram Mohanji Charitable Trust, Mrs. Geeta Dhote, Mr. Aanand Mittal, Mr. Neel Sahani, Jeena & Company, Dawar's College of Commerce, Mr. Aanand Sahway, Mr. Milind Bengali, Mr. Ishan Phohoomul and Prabha Rao Family for the financial support through the Educational Grants they have provided us.

We also acknowledge the efforts of the authors of the papers published in this book for their intellectual contribution. We are grateful to the peer review committee members for their valuable expertise in reviewing the papers.

A big thank you to our very own organizing committee members Dr. Giselle D'Souza, Dr. Sheela Philp, Dr. Joan Lopes, Dr. Cindrella D'Mello, Dr. Cerena D'Cunha, Dr. Reshma Rodrigues for their painstaking efforts. Special thanks to our Tech Team Edfly Learn, Dr.

Giselle, Dr. Cerena, Ms. Natasha Dsouza and Ms. Carishma Nevis for great technical support to the webinar. A note of appreciation for Convener and Co-Editor, Dr. Shakuntala Nighot for successful organization of the webinar. We are also thankful our administrative staff Ms. Collen, Ms. Sharmila and Ms. Delicia, our students and STIE family for their extended support.

Dr. Sr. Tanuja Waghmare,

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ABOUT ST. TERESA'S INSTITUTE OF EDUCATION



St. Teresa's Institute of Education, is a pioneering Christian Minority, Teacher Education Institution affiliated to the University of Mumbai. Established in 1973, the college is recognised by UGC under section 2(f) and 12(b). St. Teresa's Institute of Education has been Re-Accredited in its 3rd cycle with an 'A' grade by the National Assessment and Accreditation Council (NAAC). The College works towards the lofty ideals of creating teachers who are competent and compassionate. The focus is on the conscientious sensitization of student-teachers to be artisans who will fashion the future of society. The institution works steadily towards its motto of 'Excellence in Education', guided by the sublime principles of St. Teresa of Avila, Patroness of our Institution. Students from our institution have been absorbed by prestigious schools and colleges in India and abroad.





ABOUT THE BOOK

Pandemic 2020 forced us to rethink and recreate academic libraries. Utility and functions of library are changed significantly and permanently. Teaching Learning is shifted to online mode so academic libraries also should extend the online services to continue with the mission of supporting teaching and learning. To meet changing, emerging needs of education society, academic libraries have to gear up and embrace the needed technology. Integration of subjects and curated open E resources are making the knowledge accessible through technological solution at fingertips. Automated and Electronic libraries have to overcome all limitations, to expand user's horizon in learning thereby making available enormous information. Creative & innovative thinking towards library is needed to achieve this goal.

Libraries will have to build a good digital collection. It has to be ready to handle high traffic of digital resources and users. The way information will be made available and provided is will also be changing. To prepare for new functionality, recreation of libraries is necessary. Libraries will have to be revised and remodeled to gear up to changing need of the users and parent institutions.

To address the paradigms shift in Education and knowledge society, to provide forum for brainstorming on various issues related to present and future Education system, to help and equip education functionaries with the required 21st century Education skills, to upgrade and to facilitate progress in the education system, a National Webinar was organized by St. Teresa's Institute Education on 19th and 20th May 2020. Papers included in this book are the selected research papers, literature reviews, conceptual papers, and case studies

contributed by various academicians and librarians across India to the National webinar Education GenNext under the subtheme Libraries GenNext: Perspectives, Opportunities and challenges. Authors have expressed their intellectual thoughts and findings on following subtopics.

- Open Educational Resources
- Knowledge Management with ICT, Artificial Intelligence, Automated-Digital-Online Libraries
- Innovative library services with M- Applications, Social Networking
- E-Information Sources and Best practices in Changing Era, Digital Information Literacy
- Modern Trends and Policies in Library
- Professional Stress
- Research and Information Ethics
- Future and Present Challenges in Librarianship
- Reading Culture, Information Need and Use,

Dr. Shakuntala Nighot

Enhancing Visibility of Authors through Academic Social Platforms

*Dr. Sarika Sawant**

ABSTRACT

Researchers/ Authors/Academicians need to make sure that their publications can be found easily in citation databases such as Scopus, Web of Science and Google Scholar. Also they need to create and manage author profiles, such as Publons/ResearcherID, ORCID, Google Scholar Citations profile or Scopus Author ID. Scholarly/Academic collaboration networks, such as ResearchGate, Academia.edu and Mendeley, gives authors the opportunity to be found, to showcase researchers/authors interests, their work and to follow fellow researchers from the same profession/same institutions. It increases the chances others will read and cite their publications. These networks are also useful to share and to access scientific articles/research reports and grow your network.

Keywords: Academic visibility, Authors profile, Publons/ResearcherID, ORCID, Google Scholar Citations, ResearchGate, Academia.edu, Mendeley, LinkedIn

INTRODUCTION

Publicity is the crucial aspect in today's world whether it is film star, promotion of movie, branding a product, launching a new

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mission, a political event etc...everybody wants attention and publicity. Academicians are also in need to showcase/publicise their research. Academicians do it for their own self and to serve the society. There is a clear intension to reach wider research community by adopting different methods. Visibility brings audience, attract funders, increases the rating of institution authors belong, feedback on research, criticism on their research, further research, future collaborators and networking and so on...

When a research paper is written it goes through entire process of scholarly communication right from its manuscript level to its publication. But in today's context, this scholarly communication cycle is extended and modified. The researcher's role is ended when manuscript is revised, assessed, accepted and published. Then the role of publisher to publicise the paper to get the right audience for the paper. But now researcher is also actively involved in the promoting their own research. The publicity of research can be done before publication means after manuscript acceptance and after publishing in the journal.

Earlier when the journal is published, it's basically the publisher's responsibility to index the journal in various databases, expose the metadata so the search engine to get indexed in these databases. But the problems arises in finding your own publications in citation databases - Scopus, Web of Science and Google Scholar. Sometimes it can be more difficult than expected. Most probable reasons stated by Erasmus University Library why and how it can be difficult that is very true in every sense is as follows:

- Author share their name with other researchers - does the algorithm used by the database disambiguate the authors correctly?
- Author sometimes use different names, for example first name vs. initials or married vs. maiden name
- Author have a name that automatic indexing systems have difficulty processing - compound names, names with special characters and surnames with a prefix, such as 'van' or 'van der', can cause problems in the original publication authors name was spelled incorrectly
- Author published in a journal out of his/her normal 'scope' - this can make it hard for outsiders to decide if the publication is authors.

However, there is a solution authors can claim publications by creating or checking author profiles, can enrich profiles with information about their affiliation and interests, adding publications and keep them up-to-date.

Various ways of creating author profiles can be created as follows

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- How and why is your work being used? By looking at citations and alternative metrics to assess impact.
- Linked to tenure/Promotion
- Influences funders for grants and renewals
- Confirm that research findings were properly attributed and credited
- Determine if research findings are duplicated, confirmed, corrected, improved or repudiated
- Document the uptake of your research
- Identify similar research projects
- Identify possible collaborators
- Document research impact
- Quantify return on research investment

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Academia.edu

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ResearchGate

Author can use ResearchGate to share research publications, find collaborators, access job boards, and ask and answer questions across disciplines and borders, in real-time. Full-text publications authors upload on ResearchGate profile are indexed by Google Scholar.

Mendeley

Mendeley is both a **reference manager** and a **social network**. It is best known as a reference management tool that helps author build a personalized library of research and format the references as author write. However, the web profile has many social features. Author can follow other authors, and create groups to collaborate with other researchers. As a social network, Mendeley has fewer features than Academia.edu and ResearchGate.

LinkedIn

LinkedIn is a social network for professionals in general, not academics in particular. It lacks some of the features of Academia.edu and ResearchGate. However, author can add a list of publications. LinkedIn might be most useful for graduate students looking to work in industry after graduation, or for researchers looking to develop industry or government connections.

In addition to these above platforms authors can also link up their research from Pinterest, Instagram, Google+ and Snapchat/WhatsApp which are usually visited by peers.

By engaging in academic social networking site such as Mendeley, ResearchGate, Academia.edu increases the visibility of author profile and their works.

The advantages of social networking sites allows authors to

- showcase profile and research output
- create a network with other researchers with the same interest
- circulate ideas for comments and engage in scholarly conversation
- disseminate works immediately
- view the download and citation statistics of publications on the platform

CONCLUSION

Creating research profiles is a good thing but it has to be updated, as your publications keep on increasing and make sure it is consistently open to the public. Information on all profiles should be consistent across all profiles. Authors should keep them linked too means for e.g. author can link up ORCID with ResearcherID and Scopus Author ID. It is also necessary to embed the links on your profile of university/college webpages, CV and email signatures. Author need to identify who has shared, discussed and cited their work, and how far work is reaching. This gives authors a better picture on their audience. Comments and conversations on the work can also be shared when author disseminate work with social media. This helps in building authors image and establishing him/her in academic/subject domain, builds a reputation, and expand professional networks. These all activities bring opportunities may be in form of research funds, invitation as article/journal reviewers etc. and other higher responsibilities.

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**Library, Information & Knowledge Services for
Education 2020**



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₹ 695/-

ISBN 978-93-89875-43-0



APH PUBLISHING CORPORATION

4435-36/7, Ansari Road, Darya Ganj,

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**Library, Information & Knowledge Services
for
Education 2020**

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Management of Library Records in the Digital Era

Ms. Sonali Vhatkar and Dr. Parul Zaveri***

ABSTRACT

In this paper, the overall the concept of records management regardless of format is discussed. The records management is important is every library, it helps to avoid duplication of records, manpower and time. It helps to provide ILL service, CAS & SDI service, networking. As the fifth law of S R Ranganathan says library is a growing organism, libraries are improving their records and collection. For that records management is necessary. The article describes the concept of the types of records, electronic records, digital preservation of records, life cycle of records, record management policy and standards of records management. Furthermore, this paper highlighted the importance of records management, benefits and challenges of records management, retention and disposition policy and ISO standards.

INTRODUCTION

Records management (RM) is the creation and administration of print or digital records, regardless of format. Records can be created by a person, researcher, organization and institution. Records management is about the management of information. The activities include the creation, maintenance, use and disposal of records. The record is the content that



COMMONWEALTH *of* LEARNING

PERSPECTIVES ON OPEN AND DISTANCE LEARNING

Technology-Enabled Learning: Policy, Pedagogy and Practice

Sanjaya Mishra and Santosh Panda, Editors

COMMONWEALTH *of* LEARNING

The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources and technologies.



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ISBN 978-1-894975-98-8

Published by:



COMMONWEALTH OF LEARNING

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Faculty Experiences of Delivering Blended Learning Courses

Jayashree Shinde

Background

The field of “educational technology” is often misunderstood as the use of technology in educational processes. The notion singles out technology and ignores the process of education (learning). The term “blended learning” (BL) is being misinterpreted in the same manner. Merely adding technology in face-to-face settings does not guarantee blended learning. The learning and

cognitive processes are ignored when technology is perceived as an end. Blended learning with a conscious focus on integrating technology as a means to achieve meaningful learner engagement helps to enrich learning environments.

Learner-centred pedagogy has always been a focus of the Department of Educational Technology (DET) of SNDT Women’s University (SNDTWU) in India, the institutional case for BL that is reported in this chapter, and BL has been implemented in the DET for a long time to make the learning process engaging.

Way back in 1995–96, when the term “flipped learning” was as yet unheard of or unexplored, the then head of DET at SNDTWU coined the term “zero lecture.” Thereafter, the department conducted several faculty training programmes on the “zero lecture project.” Self-learning materials, competency-based graded exercises, and task sheets for laboratories were introduced to minimise lectures in classes.

Digitised materials replaced handouts and library resources, while e-resources, a learning management system (LMS) and ICT tools increased the feasibility and versatility of designing BL environments. Yahoo groups had been used as a learning platform by DET since 2001. The Moodle LMS has been changing the face of BL environments at DET since 2007. Google tools such as Google groups, docs and drawings have been the simplest collaborative tools available. Not only blogging, but even micro-blogging tools and platforms such as Edmodo were explored by master’s students (Shinde & Patil, 2010). The integration of

Moodle and other ICT tools such as blogs, Edmodo, Padlet, Google tools, concept-mapping and infographic tools, and social media has led to more effective BL environments.

However, experimentation within a small group cannot change the face of an institution. Though the benefits of BL, flipped learning environments, and the LMS were being experienced by the department, convincing other higher education teachers, training them to integrate ICT, and scaffolding them were necessary. Though a few training workshops could help with sensitising colleagues and a few other higher education teachers, efforts on a larger scale

were needed. Encouraging and initiating BL in other institutes of SNDTWU was a challenge.

Blended Learning: Conceptual Framework

Blended learning is a meaningful blend (not just a mixture) of face-to-face and online learning experiences with thoughtful proportioning and sequencing in the most effective way.

Blended learning is both simple and complex. At its simplest, blended learning is the thoughtful integration of classroom face-to-face learning experiences with online learning experiences. There is considerable intuitive appeal to the concept of

integrating the strengths of synchronous (face-to-face) and asynchronous (text-based Internet) learning activities. “At the same time, there is considerable complexity in

its implementation with the challenge of virtually limitless design possibilities and applicability to so many contexts” (Garrison & Kanuka, 2004, p. 96).

In the blended environment, both teachers and students assume new roles, so teachers can become online tutors and students more autonomous learners (Grgurović, 2011).

Beginning of Blended Learning at the University

The term “blended learning” at SNDTWU is operationally defined as the creation of a learning environment by teachers, in which:

- learners have access to some resources via the Moodle LMS and/or other ICT platforms/tools;
- individual and group learning activities are managed through ICT platforms/tools; and
- classroom time is used more for discussions, group work and addressing queries instead of lecturing.

BL environments, as per the above operational definition, necessarily require the integration of ICT in teaching–learning.

Leadership plays a major role when curriculum and technology-related changes are the goal. Changes are exceedingly slow, especially when users are suspicious about the benefits of technology and unsure of their own skill sets for using technology. Lack of confidence in oneself about acquiring new skills also affects one’s acceptance level. Negative mindset and lacunae in a person’s technological

skill set affect technological interventions. Though leaders of educational organisations themselves may feel convinced of the benefits of BL, a top-down

approach does not help in such a scenario. Compulsions and rules/regulations may help in changing teachers’ skill sets to some extent but may not always help in changing practitioners’ mindset. SNDTWU has experienced different perspectives, teacher development paths, and approaches towards BL and technology integration from 2011 to the present.

Initiatives undertaken by the institute in collaboration with the Commonwealth of Learning (COL) in 2011 on a smaller scale resulted in a TEL policy in 2016

and a successful large-scale TEL implementation by 2017. The phases of the developments at SNDTWU during these six years are presented in Figure 5.1.

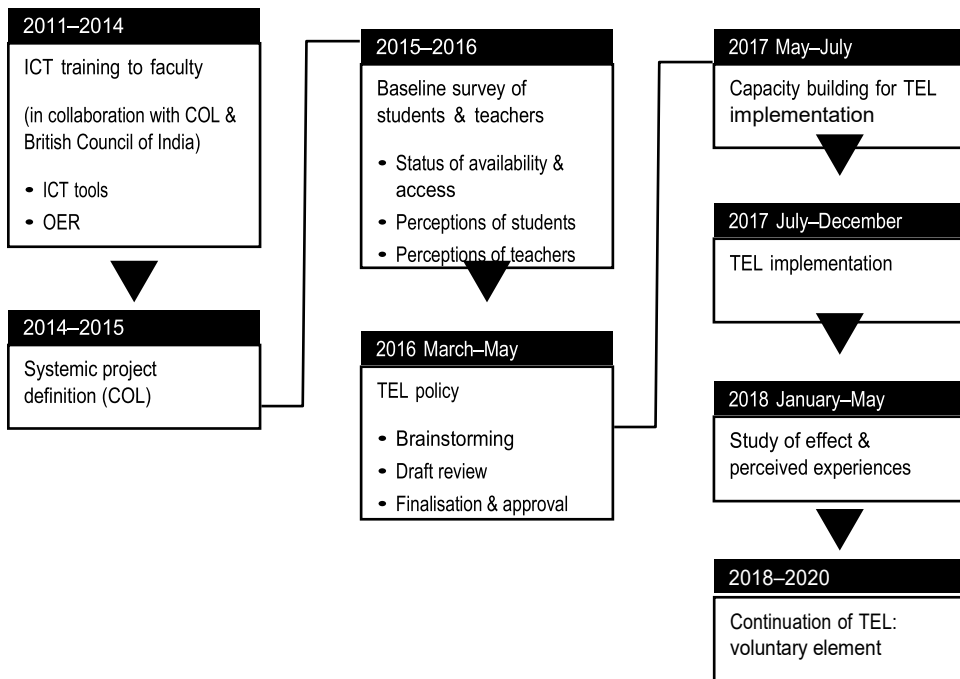


Figure. 5.1. Phases of development in the TEL implementation project.

These major phases are discussed briefly in the following sub-sections:

- Faculty training on ICT integration
- Baseline study at SNDTWU
- SNDTWU’s TEL policy
- BL implementation at SNDTWU

Faculty Training on ICT Integration

BL was not possible without teachers who were competent at integrating ICT. Efforts to train faculty at the university started in phases. Training workshops, with calls for voluntary participation, were initiated in 2011–12. COL, in Canada, and the British Council in India came forward to support these efforts financially.

- Six-day workshops on “Integrating ICT in Higher Education,” funded by COL, were organised during 2011–13. A total of 184 campus teachers and 71 teachers from affiliated colleges of SNDTWU participated in those workshops.

- A series of three-day workshops under the project Collaboration for Network of Educational Technologists in India, funded by the British Council, were organised during 2014–16. About 80 campus teachers, 30 teachers from the university's affiliated colleges as well as 60 teachers from universities in other states were trained during these years. Apart from these, 75 campus teachers were oriented by the then vice chancellor in planning blended courses, followed by demonstrations of the Moodle LMS. Teachers were expected to submit their course plans, and feedback on every course plan was provided.

This rigorous intervention achieved the following outcomes:

- University teachers started thinking seriously about using ICT tools and platforms.
- Others realised the advantages and role of BL and basic technology skills in their professional life as teachers.
- Some teachers started using computers for the first time.
- Use of email became a regular practice for some.
- Demand for computers for both students and teachers emerged during these workshops.

The university simultaneously initiated the process of establishing infrastructural facilities and achieved several milestones, such as a desktop computer for every teacher from graduate departments, labs for students on all campuses, fibre optics and a leased line for Internet and Wi-Fi, organisational emails, and the provision of on-demand support for creating LMS-based courses, during 2012–16. A few of the teachers joined training initiatives as resource persons. About six teachers responded to the call for developing and announcing online courses and offered short-term courses successfully.

Immediate implementation of BL was still not seen on a large scale. Lack of the necessary infrastructure and more rigorous training were the reasons cited by the teachers. The teachers' mindset was also a major challenge.

Baseline Study

Year 2014–15 proved significant in the process of creating a BL ethos in the university. Demand from campus students was an eye-opener for many teachers. This bottom-up approach was a result of the baseline survey on orientation and perceptions about TEL conducted across all three campuses of the university. The survey was the first joint initiative under the TEL project with COL. All teachers and a representative sample of students across all disciplines from all three campuses were targeted through the survey. The sample was administered using a comprehensive survey tool developed by COL (Kirkwood & Price, 2016). A total of 775 students out of a student population of 7,550 were surveyed. The sample of 775 was selected at a 99% confidence level with a 3.5% margin of error. Out of 280 campus teachers, 225 responded to the survey.

The results revealed some interesting findings. It was found that about 94% of teachers had Internet access at home, and 90% claimed to have Internet access

in the office. More than 90% had a presence on social media platforms. About 66% claimed to be proficient in the use of email and search engines, whereas 31% claimed to have basic skills in these areas. The Moodle LMS was used at the “expert” level by 18%, whereas another 40% claimed to have been trained in Moodle.

Though 70.5% agreed that they had undergone training, 63.6% said that the university provided regular training in the area. The rest expected more rigorous and regular training programmes and continuous support. Over

90% of teachers agreed about the benefits of using TEL for achieving effective learning, learner-centeredness and collaboration among students.

Learners’ data proved extremely useful for future planning. Though a large majority of teachers often claimed that the campus students did not possess any technological facilities at home, nearly 88% of students claimed to have access to Internet, and 75% of them used smartphones to access the Internet. Most of the learners expressed the desire for teachers to use TEL environments. About 85% demonstrated a positive attitude toward learning through technology. Many, through their responses to the one open-ended question, claimed that the use of TEL would help them develop ICT skills and make them ready for the global world. The need for TEL thus emerged from both the teachers and the students, particularly from students who wanted to be skilled 21st-century learners.

TEL Policy

There was a dire need to have a policy framework within which TEL could be located. The findings of the survey were therefore shared with a group of about 30 teachers at the university, who discussed the need to prepare a TEL policy for the university. Brainstorming resulted in a draft TEL policy.

Simultaneously, a strategic plan for TEL implementation was developed. The policy was formulated and then approved by the Management Council of the university in May 2016 (SNDTWU, 2016). COL’s contribution was significant in the process of developing the policy draft.

Another two-day workshop was organised in June 2016, i.e., at the beginning of the new academic year. Discussion regarding TEL implementation in

light of the TEL policy was conducted during this workshop. Planning of BL environments was discussed, along with the demonstration of the LMS and a few tools. The process of motivating faculty to use TEL began here.

These efforts towards TEL implementation did not leap forward on their own. There was a pause of one year in the process. Intrinsic motivation factors, such as a positive attitude towards TEL implementation, helped only five teachers to implement TEL immediately. Evidently external motivating factors were needed to support any such technological interventions. The remaining teachers accepted the call to implement TEL after a gap of one year as a response to the TEL project, with COL’s support. Those who had already been using BL, ICT or the LMS responded to this call, as it was leading to a systematic (global) recognition of the efforts they had voluntarily begun.

Participation in an international-level research project also proved to be a significant extrinsic motivator for many.

Related Studies on Blended Learning

BL in India is still at the exploration stage. The BL approach to teaching a three- or four-credit course implies teaching through face-to-face and online modes with proper weight given to both.

Many studies of BL have been undertaken across the world, looking at numerous aspects of the process, such as teachers' and students' perceptions of BL, achievements gained from BL, and teachers' and students' awareness about

ICT integration. This section takes stock of what research says about teachers' experiences of using the BL approach in their teaching.

Experiences and case studies shared by authors reveal diverse aspects, approaches adapted, challenges faced, and strategies used for overcoming challenges while implementing BL. Studies about BL implementation as reported by Jeffrey et al. (2014), Sheffield et al. (2015), and Byrka (2017) are a few examples of how shared case studies help with learning new lessons about BL implementation.

Luo et al. (2019) analysed five courses through a case study approach on the basis of seven principles of flipped learning. They concluded that even though the ways in which faculty members approached flipped learning differed individually,

the seven basic principles remained the same and were found in all courses: (i) every flipped learning course facilitator encouraged contact between students and faculty; (ii) it developed reciprocity and cooperation among students; (iii) it encouraged active learning; (iv) feedback was given promptly; (v) time on tasks was emphasised; (vi) it communicated high expectations; and (vii) it respected diverse talents and ways of learning.

Most of the studies undertaken to find out teachers' experiences or perceptions concluded that the teachers expressed satisfaction about student achievement through the BL approach (Oh & Park, 2009; Schindel et al., 2013). Sorbie (2015) found that teachers believed BL promoted individualisation, collaboration, organisation, engagement, real-world relevance and student-centred learning. Formative assessments were found to be an effective element of BL courses.

At the same time, teachers using the BL approach had voiced concerns about challenges related to time, technical training and institutional support (Oh & Park, 2009; Sorbie, 2015). Teachers also needed to learn many new skills, such as how to integrate materials, use hardware and software, and troubleshoot computer problems (Grgurović, 2011). Grgurović (2011) also reported that those who had been most successful at BL initiatives stressed the importance of institutional support for course redesign and planning.

Both extrinsic and intrinsic motivational factors have a significant impact on instructors' motivation to apply the BL approach. Along with efforts to increase motivation, different training models have been implemented across the globe to enhance capacity for using BL. At Taif University, Saudi Arabia, a systematic LMS process improvement model, named OASA, was proposed and studied to establish a systematic and effective faculty development programme for BL (Badawood et al., 2013). Wang et al. (2015) developed a Complex Adaptive Systems Framework to assess research studies related to BL. They found that only 11% of the reviewed research focused on teachers, covering teacher content, teacher technology, teacher learning support and the teacher–institution relationship. Among these

relationships, the one between the teacher and the institution emerged as key because it was related to institutional support for professional development.

Drawing upon the findings from previous studies, the BL experiences of faculty and learners through courses conducted by 15 teaching faculty of SNDTWU were studied. The study looked at the pedagogical paths designed and followed by the faculty, the extent of LMS use, and experiences and challenges while using BL.

Implementation of Blended Learning

The TEL implementation project, which aimed to promote BL environments, was planned for the 2017–18 academic year in collaboration with COL. The university vice chancellor supported the project and encouraged teachers to participate

in this new initiative. Here, BL implementation was not merely for the sake of increasing the use of technology; the aim was to achieve a comprehensive BL environment on the campus. The project consisted of three aspects:

1. Training university faculty in TEL implementation to achieve BL environments.
2. Planning and implementing BL courses.
3. Evaluating the project using mixed-methods research.

Since the entire undertaking was considered a research project, a mixed research method was planned, consisting of an experimental study with quantitative analysis of the post-intervention data, and a case study approach to analysing qualitative data. The quantitative data of all the participating students was used.

Examination scores were obtained from the centralised examination section of the university. A two-group, post-test, only quasi-experimental design was employed (for details, see Shinde, 2019).

This chapter does not aim to discuss the quantitative research findings. The process of developing a BL ethos across the campuses, and its continuation in the next two years, was enriching. Instead, the chapter focuses on the successes, challenges and lessons for the future continuation of BL. Data obtained from teachers’ interviews, along with content analysis of LMS-based courses, were used for the qualitative analysis.

The phases of the BL project are presented in Figure 5.2.

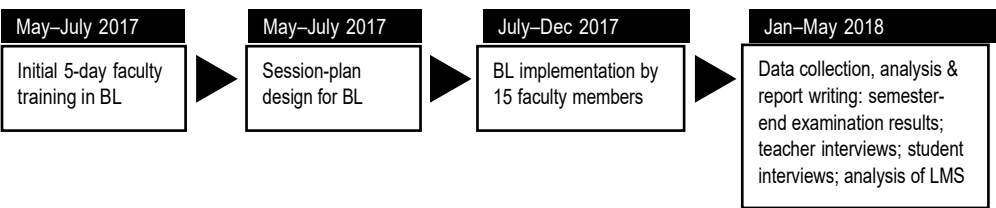


Figure. 5.2. Phases of the BL project at SNDTWU.

Training of University Faculty

The initial five-day training workshop was arranged in May–June 2018 in three phases:

1. One-day workshop: 5 May 2017 (orientation about BL and flipped classrooms, content chunking, writing objectives, planning out-of-class resources).
2. Two-day workshop: 29–30 June 2017 (planning in-class activities, introduction to the Moodle LMS, course planning with the help of templates).
3. Two-day workshop: 11–12 July 2017 (uploading resources on Moodle, ICT tools such as Google drawing, Padlet, blog, etc.).

Apart from the project investigator, who used BL in all her courses, the final team of 15 faculty members submitted BL session plans and started using the BL approach. One of the teachers taught two courses through BL, so a total of 16 BL courses were implemented during the July–December 2017 semester.

Planning and Implementation

The team of 15 faculty members selected one four-credit course each and submitted BL session plans for the July–December 2017 semester. The teachers were provided with courses created in the Moodle LMS. Teachers uploaded their resources on Moodle and started BL implementation right from the beginning of the semester. Some teachers tried to upload almost all of their resources at the beginning, but many gradually uploaded the resources one by one. Activities were planned during the course of teaching. BL was implemented during the July–December 2017 semester. Mentors were introduced to these teachers

for pedagogical and technological guidance. Teachers interacted with the project investigator over the phone or met face-to-face when needed. A Moodle administrator was consulted from time to time for technical advice. A few

features, such as LMS plug-ins, were added at the request of a few teachers. Moodle was supported on mobile phones, which resolved the issue of having access devices available.

Evaluation of the Project

1. Methodology

TEL intervention helped the faculty team to learn several valuable lessons, and many of the observations were worth studying as a case. The observations helped with understanding how the university approached BL, how TEL supports blended environments, and how teachers exploited the LMS in different ways and demonstrated different pedagogical paths towards BL. A case study approach was used as the qualitative methodology.

2. Sample

The final sample consisted of:

- Campuses: 2 (Juhu and Churchgate campuses in Mumbai)
- Institutes: 8

- Teachers providing BL: 15
- Courses selected for BL: 16
- Students under intervention: 628
- Students under intervention from multiple teachers using TEL: 396

3. Instruments

Interview and content analysis techniques were used for the qualitative data collection. Triangulation of data obtained through these techniques was used to derive interpretations.

a. Interview

Semi-structured interviews were planned. A set of indicative aspects was designed, consisting of the following:

- initial reaction to BL and motivation to participate
- role of initial training workshop and skill development for BL
- experience with LMS and its usefulness with respect to its features
- challenges faced while using LMS
- teaching–learning strategies used in the class
- time management for BL
- effect of TEL on learners’ academic performance and behavioural qualities
- learners’ reactions to TEL
- availability and challenges of physical infrastructure at the institutes
- overall experience

All teachers were interviewed by trained research assistants. The interviews were recorded, and transcripts were analysed by creating codes and categories.

b. Content Analysis

LMS courses were analysed using a content analysis technique. LMS courses were analysed against the following aspects:

- pre-instructional resources (syllabus, learning objectives)
- web resources
- teachers’ resources, such as slide presentations, videos, etc.
- discussion forums
- special features of LMS, such as “lessons”
- quizzes
- instructions regarding other ICT tools, such as Padlet, blogs
- instructions regarding activities such as cooperative learning strategies

Findings and Implications

The findings of the evaluation study are briefly summarised in the following.

Use of the LMS

All but three of the teachers in the project uploaded syllabi to the LMS. One teacher posted a detailed content outline on the LMS, whereas another provided a link to a web-posted syllabus. More than 50% of the teachers posted course objectives and module objectives for their LMS-based class.

The LMS was mainly used by the teachers for sharing resources. Many resources identified by them were shared on this platform, including links, pdf files, slides, e-books, research papers, and videos. A few library books were also introduced on the LMS. Research papers and external links were shared by most of the teachers.

Technology as well as social science and library science teachers shared ample five-minute to 30-minute videos on the LMS. Some had posted descriptive titles for the videos, whereas others had merely posted video links listed one below the other. Supporting tasks to ensure viewing of the videos were missing in most of the LMS.

More than 50% of the teachers designed quizzes on the LMS. Two management teachers, a maths teacher and a library science teacher used several quizzes during the semester. A teacher from the technology institute used a quiz for every module. A computer science teacher embedded quizzes in the “lesson” feature of the LMS in every sub-module. Teachers used the quiz feature for easy and quick formative assessment of large classes. A library and information science teacher uploaded a question bank, whereas a mathematics teacher uploaded a sample question paper with answer key. Assessment through tests was ignored by one-third of the teachers.

The LMS’s assignment submission feature was not explored or used by many teachers. Though internal assessment makes up 50% of the grading in the graduate (master’s) programmes at SNDTWU, only three or four teachers took full advantage of the assignment submission feature. Three teachers provided concept mapping for assignments. Students rarely submitted assignments on the LMS

for three teachers, whereas a 100% submission rate to the LMS was seen for three teachers. A management teacher used Padlet for task submissions due to LMS size restrictions.

None of the teachers used the discussion forum feature to its fullest. A few teachers achieved partial participation on the discussion forum, whereas only one teacher from social sciences achieved 100% student participation. Teachers and students mentioned conducting several group discussions in the classroom, but not on the LMS.

Blended Learning Pedagogy Paths

Analysis of the data sought through interviews of teachers led to a few findings, which help with identifying different pedagogy paths for TEL. Triangulation

of the data obtained from both the techniques — i.e., interviews and content analysis — was used to derive the pedagogy paths. Four paths were identified.

1. Upload several relevant resources to the LMS

The simplest possible and least interactive path was to upload several relevant resources to the LMS. Teachers expected learners to read and view resources in the

forms of pdf files, ppt files, web links and videos. Some teachers uploaded only a few videos. Many of them planned a few quizzes. The classroom time was used

for discussion and group activities. Topics were briefly explained by some of the teachers, as learners were initially not comfortable with studying from learning resources on their own.

2. Optimal use of LMS features

LMS-based features were optimally used by some teachers. Discussion forums, lesson formats, quizzes, assignments, and (rarely) polls were some of the LMS-based activities that made learning experiences meaningful and helped with achieving learner engagement. Teachers focused on using the LMS to its fullest and did not appear keen on using other ICT tools.

3. Integration of ICT tools for learner-centred activities

A technologically more versatile path was followed by some teachers. They posted several resources and also used other ICT tools for pedagogically interesting and engaging activities. Blogs, Padlet and Google drawings were some of the preferred tools. Padlet was extensively used by two teachers. Though ICT tools other than the LMS were used, the aim was not to make teaching–learning technology driven but to create collaborative learning environments. Learners highly appreciated these ICT-based activities.

4. Pedagogically enriched environments with collaboration

Pedagogically enriched environments were created by a few teachers, who focused more on collaborative and cooperative classroom activities. Some of them integrated ICT tools, whereas others experimented with learner-centred pedagogies. Cooperative learning strategies such as Jigsaw and Think-pair-share were used in the class; and concept mapping, mind mapping, and real-life projects were some of the activities.

It can therefore be concluded that every individual teacher took decisions about using the LMS, other ICT tools and cooperative–collaborative pedagogies, depending on their own ideas about achieving learning objectives and learner engagement, as well their own skill sets. Learner engagement can be enhanced by exploiting the learner-centred features of the LMS and/or using collaborative ICT tools as well as by using learner-centred classroom strategies. Those who are not keen on exploring and experimenting with learner-centred environments need extrinsic motivation, handholding or sets of guidelines.

The overall experiences of teachers with implementing the BL approach led to several common findings:

- It is not a very easy process to make BL a regular, naturally evolving teaching–learning process. The day is still far off when the majority of teachers will stop thinking of BL as additional work and will instead start deriving benefits from it in terms of 21st-century learners' skill development as well as time efficiency.
- Some teachers gave up on the idea of using a particular feature of the LMS (e.g., downloading multiple assignments, uploading feedback files, etc.), instead of approaching the mentor or resource persons from DET for trouble-shooting.
- Some teachers did not even realise that there were solutions for their technical problems.

- A few teachers focused more on using the LMS so they could achieve TEL, but they missed how to use the BL approach in its true sense. Classroom pedagogies were often dominated by teacher-talk in such cases.
- A few teachers were highly motivated and were practising TEL regularly.
- Individual teachers approached TEL in many ways, which generated rich data about different TEL pedagogy paths.
- Teachers' extent of implementation ranged from using Moodle as a bucket into which they dumped all of the learning resources, to using optimal features to make the LMS learner centred and even adaptive. Classroom activities also varied, from discussion in large groups and addressing queries to cooperative learning activities. The extent of teachers' participation in TEL depends on their level of motivation, planning capacity, implementation of plans, as well as skill sets in technology and pedagogy.

Present-Day Scenario

Today, after a gap of two years, when the LMS and other activities are analysed, the following observations can be made:

- Twenty campus teachers joined an online training programme for Moodle in July 2019.
- A total of 21 teachers from different disciplines used BL with the support of Moodle during the 2019–20 academic year. From 1,200 to 1,500 students are benefiting from the LMS every year.
- The response to ICT-related faculty training workshops is increasing. About 140 campus teachers participated in an extensive faculty training programme in ICT integration during the COVID-19 pandemic, and many of them reported successful implementation during the lockdown period (May 2020). Twelve out of the 15 sample teachers contributed as e-tutors in this massive teacher-training programme. Forty-four campus teachers and 20 teachers from affiliated colleges of the university received extensive hands-on training in the Moodle LMS in July 2020.
- Readiness for online teaching with learner engagement is increasing.

Lessons Learnt

The following lessons were learnt during the implementation of the BL project.

- BL environments were mainly achieved by practising and imparting training in TEL. Training, continuous handholding and monitoring are needed in systematic implementation initiatives.
- Several one-day or half-day sessions on different ICT tools and cooperative learning activities need to be conducted during the semester.
- Mentoring needs to be more systematic, requiring reports about the interactions between mentors and teachers.
- Monitoring the LMS and even observing a few classroom activities may help to achieve better blended environments.

- Sharing of experiences within the group never happened in its true sense. One or two meetings for teachers to share their teaching–learning experiences with the whole group are needed.
- Project-related responsibilities such as submission of reports, administration of tests, and participation in meetings and workshops during the ongoing intervention need to be made mandatory. These can form part of the participation agreement with teachers. Written agreements of this kind may help with making them feel more responsible for participating in the project, which will ultimately help them and their learners to reap all the benefits of BL.

The journey of blended learning in a higher education institute is an enriching experience. Systematic implementation of a blended learning approach requires dynamic leadership, commitment from teachers, mentoring by colleagues, and systematic planning, as well as continuous monitoring at the institutional level.

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Insider Threat Detection Based on Anomalous Behavior of User for Cybersecurity



Ujwala Sav and Ganesh Magar

Abstract In today's competitive world, business security is essential. To secure the business processes and confidential data, organizations have to protect the system by implementing new policies and techniques to detect the threats and control it. Threats for cybersecurity are classified into two types, outsider and insider threats. Both threats are very harmful to the organization. These may convert into a severe attack on the systems upon future. Outsider threats have to take more effort to break the security system. But inside users are those who are privileged to access the system within the organization. As data form is digital, it is straightforward to transfer from one to another. Data leakage, theft, and sharing are easy for insiders. Therefore, there is a need to research in this domain. In this proposed paper, a study of insider threat detection based on the anomalous behavior of the user for cybersecurity is presented. The data processing and anomaly detection algorithms are performed for insider threat detection by researchers. This research paper presented a study on insider threat detection based on the anomalous behavior of the user for cybersecurity.

Keywords Cybesecurity · Insider threats · Anomalous behavior · Machine learning · Data leakage · Bipartite graph

1 Introduction

Insider threat detection based on the anomalous behavior of the user is required to protect the business from cyberattacks. Therefore, there is a necessity to study the anomalous behavior of users. The research paper processed the data using the machine learning algorithm and identified insider threats.

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1.1 Insiders and Insider Threat

Insiders are the legal users, having trustworthy authorized access to the resources of an organization. These insiders have privileges to use and process the data. Usually, 60–70% insiders are doing their job honestly and giving their best. But, 30–40% insiders are not satisfied with their job profile, a task assigned, position, responsibilities, salary, the boss, infrastructure, coworkers, and so on. These insiders are a few but very dangerous if you do not identify them within the organization. Insiders are careless. There is a lack of awareness of security precautions. Also, orientation, induction, and training have to be given to protect the organization's confidential data.

There are many motivations for insider threats. Insider threat detection is a difficult task, as the insiders do not have to break the security layers. They are authorized to access the data. Reasons for insider threats are careless behavior, disgruntled user, the greed of users to earn more money, revenge attitude due to dissatisfaction with their job and salary, and lack of facilities availed in the organization. There are guest users—third-party users. Competitors may launch spy in your organization. Spy is working for competitors, they are leaking data, stealing data, and also sharing your important data with them.

1.2 Anomalous Behavior of User

Several methods can detect insider threats. One of the most effective ways is to monitor the anomalous behaviors of an insider. Anomalous behavior is like data outliers. Generally, 95% of insiders behave normally. Some of them are loyal do their work sincerely, and they are assets for the organization. They are dedicated ones. A few are not satisfied but work for a salary. There are very few whose behavior is anomalous, and they might be harmful to the organization badly; this impacts the image, profit, standard, and many more. Therefore, there is a requirement to monitor the behavior of the insiders and detect insider threats based on anomalous behavior analysis of insiders

2 Related Work

Business security is a significant issue in the digital era. In this digital world, it is difficult to protect the information as it is effortless to transfer from sender to receiver. Also, no checkpoint to check the confidential data transfer from the organization. With this concept, to stop data leakage and data sharing, some of the reviews have been included in the literature review.

IBAC stands for Intent-Based Access Control which is recommended to detect the purposes of access based on current knowledge of purpose. It is possible to find out the risk on the basis of the study of user intention and motivation. This model helps to find out the threats based on intention, but still, there is a need to strengthen this model [1].

There is a methodology for insider threat detection based on rules of behavior of the user. This is known as BLITHE, which monitors data in the smart grid. It uses consciousness and accuracy [2].

It is observed that most of the research is based on post hoc personality and to find out the vulnerability of a person to find out the insider threats. This game-based method is used to find out the behavioral and personal differences of employees. This paper focused on facial expression, linguistic features, and personality variables [3].

Deep autoencoder and random forest classifiers are used to detect insider threats using time series activities of inside users. Data are classified and f source is computed and the result is compared with other classifiers [4].

CADS is a community anomaly detection system. Insider threats are detected using an unsupervised learning framework using logs of collaborative situations. It consists of two parts as relational pattern mining and anomaly detection, to secure organizations in wireless sensor grids, sensor nodes (SNs) must create secret collective keys with adjoining nodes [5].

There is growth in multimedia-based applications, and its usage is leading to multimedia traffic. In this paper, the hybrid deep learning algorithm for anomaly detection is proposed. It includes suspicious information of users on social media. It is evaluated by performing the experiments which are based on real time and datasets. This proves the effectiveness of anomaly detection [6].

It is a challenge to find out insider threats for the information security society. The progressing system is also functional to enhance classifier accurateness. Comprehensive representations are estimated through investigation of their connected confusion matrix along with the curve of the Receiver Operating Characteristic, and the greatest performance classifiers are combined into an ensemble classifier. "This meta-classifier has an accurateness of 96.2%, with an area below the ROC curve of 0.988". This shows the effectiveness of the confusion matrix [7].

Data leakage is an insider threat called as data leakage prevention (DLP). To quality, a low-complexity score walk algorithm is projected to control the final understanding [8]. The concept of isolation Forest enables subsampling activity to the degree, which is not there in present procedures. It generates an algorithm that needs a linear time complication with low constraints and small memory prerequisites for anomaly detection. iForest has several unrelated conditions where the working outset does not comprise any anomalies [9].

Predict the insider threats from huge and composite auditing data, and system findings can be used to outfit the anomaly detection with an ensemble of deep autoencoders. Each autoencoder in the cluster is trained using an exact group of audit data, which signifies a user's distinctive behavior accurately. Mathematical investigated using a level dataset for insider threat discovery. Outcomes that the detection system

could distinguish all of the harmful insider activities with a practical false positive rate [10].

The survey work finds out three kinds of insiders: spy, masquerader, and unintended criminal. It reviews the precautionary actions from an information analytics viewpoint. When direct and indirect threats work are categorized as swarm, web, or related databases, it is possible to identify work. It is extracted from the engaged data and algorithm [11]. The finding method assesses how reliable an analyst is across dissimilar tasks and increases an awareness if any significant change is detected. A standardization process is hired, which permits us to associate across a group variation that is due to disagreeable actions [12].

In this paper, “verifying the user authorization and performing the user authentication together whenever a user accesses the devices for threat detection. The scheme computes each user role dynamically using attribute-based access control and verifies the individuality of the operator laterally with the device. Security and performance analysis display that the projected system struggles numerous insider as well as outsider threats and attacks” [13].

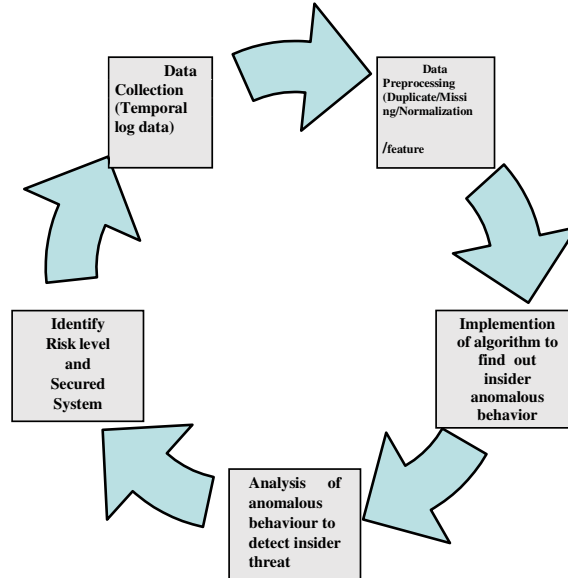
This research paper presents a risk of social media through insider threats in an organization. The approach is defined as Zero-Knowledge, which is leveraging the existing techniques to validate the evidence of social media without exposing organization confidential data [14].

No research is useful to identify an insider threat. Safety actions are required to find out breaches in prior. An investigation of malicious action stops it. Consequently, there is a significant theoretical shortfall in current cyber defense architecture [15]. In the relational database for classification, a framework is used for predicting and mitigating insider collusion. It monitors insider transactions, accesses, and inferences. This helps to reduce the possible collusion of attacks. This is also used to find out the collusion insider threat to reduce the potential attack [16].

3 Methodology

Insider’s temporal log data is used for insider threat detection. This process helps identify the anomalous behavior of insider and its analysis is used to detect insider threats. The research flow for this process is as follows.

In the research flow, Fig. 1, firstly, insiders log data collection or data generation process is done. Once data is collected, data preprocessing, including removal of duplicate data, finding out the replacement of data, scaling, and standardization decision for data processing to work out are done. Now this preprocessed data is used to find out anomalous behavior of insiders by implementing a machine learning anomaly detection algorithm.

Fig. 1 Research flow

4 Data Processing and Algorithm Analysis

4.1 Data Processing

Insiders' temporal logon and logoff log data and organization user data are collected from Carnegie Mellon University. R3.2 dataset is used for this research paper. The total number of records is 8 lacs. This consists of the previous and current user data with features like userid, user_name, user email address, department, designation, date of birth, date of joining, experience, qualification, contact number, salary information, performance, achievements, physical address, id proof number, etc. All data scanned and extracted only are the required useful data for research. Remove the other data to focus and save storage space and processing time. Therefore, only the following data features of 1000 users are considered for this paper: User_id, Role, Department, Role, Function, and Emailid (Fig. 2).

The organizational structure consists of various departments and a user-assigned role. The chart presents the total number of inside users per role. All the user data is combined and stored in one file. Check the records for missing values and remove the records as data size is large so that it will not affect the result. Insiders' daily logon and logoff temporal log data are collected. This log data consists of the following features: userid, role, date, activity (logon/logoff), machine, etc. Data are checked for missing values in each dataset. Features extracted are user, pc, and activity. The user and pc are nodes. The number of activities per pc and per users are the weighted edges. Prepare a separate logon and logoff files with the number of activity count. It

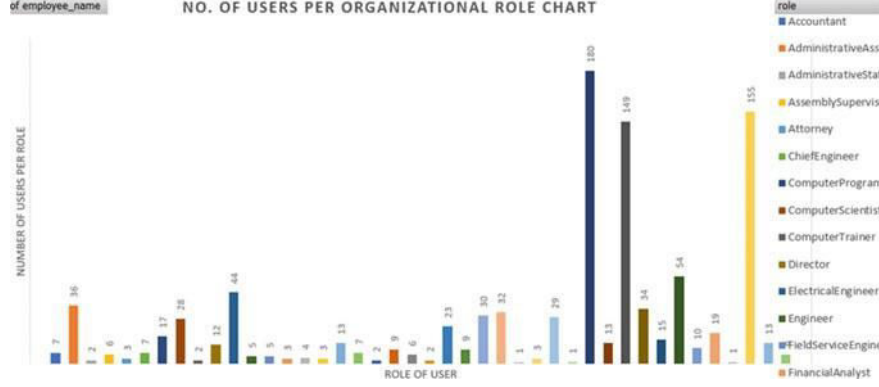


Fig. 2 Total number of users per organizational role chart

is also observed by grouping one user is logon or logoff to how many pcs and how many times? It helps to know more about user behavior in the organization.

4.2 Software Requirement

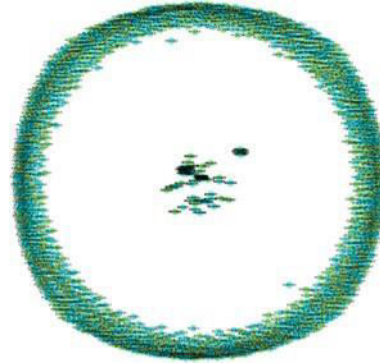
Jupyter Notebook with Python 3.7 and its required packages library are used for algorithm processing and visualization. Desktop GUI Anaconda Navigator, including distributions used to manage packages, environments, and channels is used.

4.3 Undirected Bipartite Graph Analysis

Undirected bipartite graph is constructed to show interrelationship between users and PCs. In this graph, user and pc are nodes, whereas edges represent the relationship between the users and pc. Edges' weight is the total number of logon/logoff activities. In Jupyter, it imported a bipartite graph from networks' algorithm for analysis.

$G(U, V, E)$ is presented in user_node, pc_node, and activity_count as weighted_edges. The total number of records without missing values are 9662. This visualizes the normal and outlier data in the form of the graph.

Fig. 3 Undirected bipartite graph to show a relationship between user and PC



```
( userid,      pcid,    activity_count)
[ ('AAB0754', 'PC-4470', 1),
  ('AAB0754', 'PC-5948', 345),
  ('AAB0754', 'PC-7496', 34), so on.
```

Bipartite Graph Construction

```
BG = nx.Graph()

BG.add_nodes_from(unodes, bipartite = 0) # users as nodes
BG.add_nodes_from(pcnodes, bipartite = 1) # PCs as nodes
BG.add_weighted_edges_from(weighted_edges)
```

The bipartite graph is shown in Fig. 3. This graph shows the behavior of data that the user connected to a pc.

4.4 Temporal Data Analysis

Insider's temporal data is processed and the minimum logon and maximum logon are found. It is further processed and the mean and mode of logon are found, and this helps to learn the machine normal behavior of the insider. Similarly, it is processed for logoff. The graphical representation of logon and logoff data are present in the following figures. The charts of temporal logon and logoff data analysis show the behavior of the insiders' logon and logoff activity, on how many pcs, and how many times (Figs. 4 and 5).

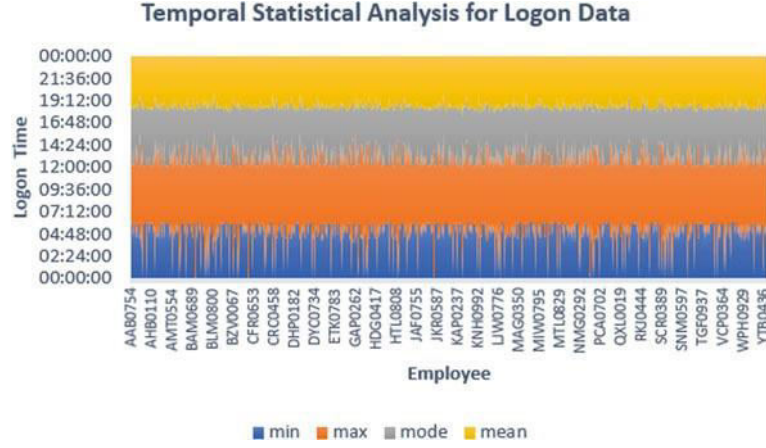


Fig. 4 Statistical data analysis for insiders' temporal logon data

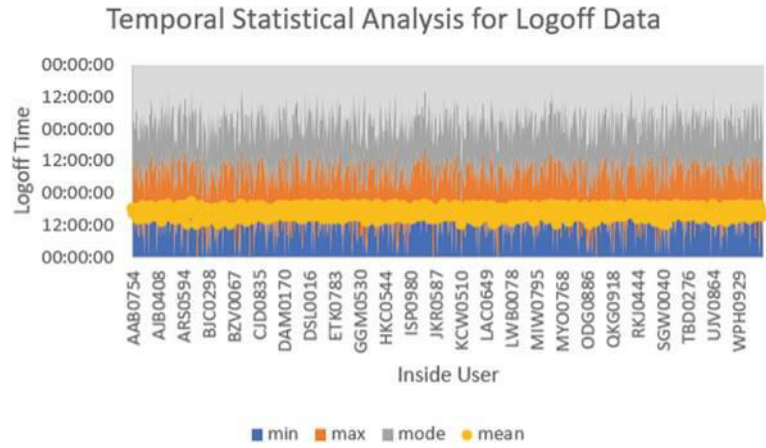


Fig. 5 Statistical data analysis for insiders' temporal logoff data

4.5 Model with Logon and Logoff Features for the Implementation of the Anomaly Detection Algorithm

In this Sklearn is used. Sklearn does not process the categorical or object parameters, it converts the time object into the numerical equivalent. A function is used to convert time to integer data. Combine the separated files of logon and logoff for the Isolation Forest input. The array is generated.

```
array([[31500, 71818, 32400, ..., 71818, 32400, 36000], [27900,
29580, 29580, ..., 29580, 29580, 25200], [30600, 31740, 31680,
..., 31740, 31680, 28800], ..., [30600, 66912, 31500, ...,
66912, 31500, 36000], [26100, 48905, 27000, ..., 48905, 27000,
28800], [ 2173, 84195, 27000, ..., 84195, 27000, 32400]],
dtype=int64)
```

Similarly, device connection and disconnection are also processed.

```
# Anomaly score
All_params_ascore =

forest.decision_function(All_params_input)
All_params_ascore
All_params_result.loc[All_params_result['ascore'] < 0]
# possible outliers
```

User	Ascore	
0	AAB0754	-0.044789
9	ABW0466	-0.010166

After processing this data, we have see 289 records of behavior is anonymous. It is also checked with K-Nearest Neighbors KNN, Histogram Base Outlier Detection HBOS, and Local Outliers Factor LOF algorithm using the PyOD library. Figure 6 shows anomaly visualization using KNN which is followed by (Fig. 7).

PyOD means Python outlier detection algorithm. It is also known as anomalous behavior detection algorithm. Algorithms are giving an outlying score. It will be compared to an internal threshold to determine the final outlier. Therefore, specific algorithms for anomaly detection are used.

Angle-based Outlier Detection algorithm shows the relationship between neighbors. The variance of cosine shows anomalous behavior. It is useful for high-dimensional data. K-Nearest Neighbor uses a mathematical classification algorithm.

Fig. 6 Isolation Forest for anomaly detection

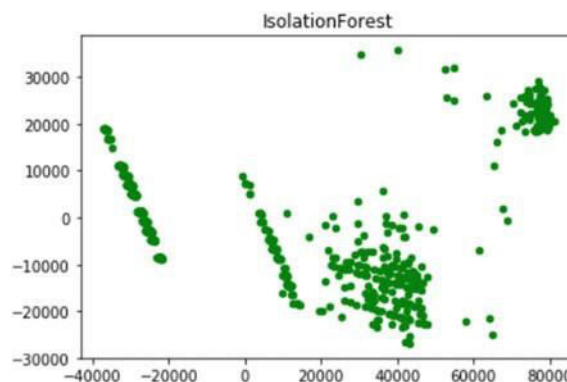
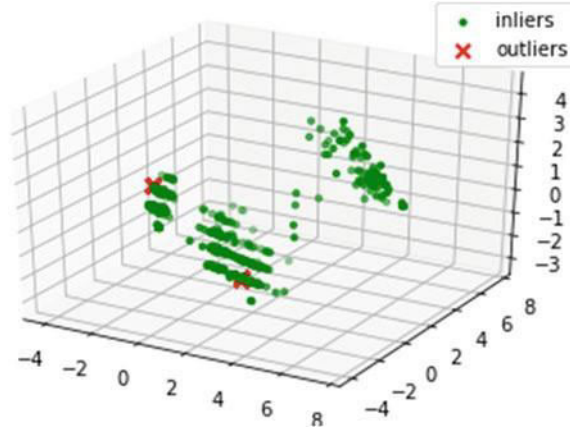


Fig. 7 All parameters for KNN model



PyOD helps KNN which includes largest, mean, and median detectors as anomaly scores.

Isolation Forest is developed on random forest and decision trees. There is a random selection of root, imagine outliers are close to the source. An outlier is identified with less number of partitions. Local Correlation Integral (LOCI) is valid for the detection of a group of an outlier.

4.6 Risk Control Model with Logon and Logoff Data

In this model, observed anomalous behavior is analyzed, and on the basis of severity of the risk, action will be taken by the organizational security executive. Detected anomaly is reported to the security department for further action. The risk control model will develop after all parameters for anomalous behavior study.

5 Conclusion and Future Work

In this research, a study of insider threat detection based on the anomalous behavior is performed. It helps to detect and control insider threats. Specifically, users, temporal logon/logoff data, and device data are processed. Insiders' logon and logoff data behavior is observed for each user and analyzed. An undirected bipartite graph is constructed to know the interrelationship between user and pc. In statistical analysis, minimum, maximum, mean, and mode are computed for given data. The values of statistics helped to understand the normal behavior of each user, and trained the machine to identify anomalous behavior of the insider. In the further part, the user node, pcnode, and activity count for weighted edge features used. In the algorithm

implementation, Jupyter and Sklearn with Python are used for PyOD anomaly detection algorithms like KNN, LOF, HBOS, PCA (Principal Component Analysis). The isolation forest algorithm processes and finds out the anomalies in the data. A general model is developed on temporal data to test the anomaly by finding ascores.

The risk control architecture designed to manage insider threats is based on the anomalous behavior of the user. The risk is characterized into three levels: high, medium, and low level. Insiders' log data monitor and identify anomalous behavior.

In the future work, a different type of dataset will be used to check the accuracy and performance of the model using advanced few deep learning along with machine learning algorithms. The algorithms' implementation and analysis will be processed for future study of this research.

Acknowledgments I wish to acknowledge the Software Engineering Institute of Carnegie Mellon University and Exact Data LLC for making available data for the research study.

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Visual Disability

A Resource Book For Teachers Vol.2

Edited by:

Anuradha Mohit Dalmia, Namita Jacob, A. K. Mittal & S. R. Mittal

**NATIONAL INSTITUTE FOR THE EMPOWERMENT OF PERSONS WITH
VISUAL DISABILITIES (DIVYANGJAN)**

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cannot be seen or ever touched,
they must be felt with the heart. ”

- Helen Keller



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