ISSN 0975-0797

Journal of Education



8

A Peer Reviewed Refereed International Research Journal

Volume XIV

No.2

Dec. 2022



NATIONAL EDUCATIONIST COUNCIL

Vision to be Transformed into Reality to Meet out Global Challenges in the Field of Education)

Website: www.nec-india.org

JOURNAL OF EDUCATION & PEDAGOGY



(A Peer Reviewed Refereed International Research Journal) Volume-XIV, No. 2, Dec. 2022 Published Biannually

By National Educationist Council

EDITORIAL BOARD

Chief Executive Editor	: Dr. Harendra Singh, Professor & Principal/Director, D.P.M.(P.G.) Institute of Education, Behsuma, C.C.S. University, Meerut, India				
Executive Editors	: Dr. P.C. Naga Subramani, Professor, Dept. of Pedagogical Sciences, Tamil Nadu Teachers Education University, Chennai, India				
	: Dr. Neelam Kumari, Head of English Department, Kisan Post Graduate College, Simbhaoli, C.C.S. University, Meerut, India				
	: Dr. R.S. Mishra, Former Reader, C.S.S.S.(P.G.) College, Machhra, C.C.S. University, Meerut, India				
Members	: Dr. Olena Vynoslavska, Professor & Head of Psychology and Pedagogic Department, National Technical University, Kiev, Ukraine				
	: Dr. Theodore W. Frick, Professor of I.S.T. Department, School of Education, Indiana University, Bloomington, USA.				
	: Dr. Dzintra Ilisco, Professor & Docent Chair, Institute of Sustainable Education, Dugavpils University, Latvia.				
	: Dr. Joseph Mworia Wamutitu, Professor, Dept. of Curriculum and Instruction, Egerton University, Njoro: Kenya.				
Advisory Board	: Prof. Rajarshi Roy, Vihwa-Bharti, Shantiniketan West Bengal, India				
	: Prof. Sunita Mishra, Dean & Head B.B.A. University, Lucknow				
	: Mohd. Shamsuddoha, University of Chittagong, Bangladesh				
	: Prof. Aejaz Masih, IASE Jamia Milia Islamia, New Delhi				
	: Prof. B.D. Sharma, Formerly with Atlanta University, USA				
	: Prof. I.S. Sethi, Former Head, Punjabi University, Patiala				
	: Dr. T.R. Kem, Former Secretary, U.G.C., New Delhi				
	: Dr. Pranav, MJP Rohailkhand University, Bareilly				
	: Dr. K.R. Singh, ES, SGSUKL, London UK.				
	: Dr. S.K. Verma, C R E N A Un., Maxico				

Views expressed in the research papers/articles inside are the personal opinions of the contributors. National Educationist Council or Editorial Board of the Journal of Education & Pedagogy will not be responsable for them. All disputes are subject to the Jurisdiction of Meerut (India) courts only.

All right reserved. No part of this publication may be reproduced in any form or by any means, electronic, photocoping or otherwise, without permission in writing from Chief Editor, Journal of Education & Pedagogy.

SUBSCRIPTION FEE

With in India	Out Side India/Abroad
Rs. 1500/-	\$ 350

One year

Designed & Type Setting by: Navneet Commercial College 86, Kapoor Commercial Complex, Tej Garhi, Garh Road, Meerut Mobile: 9917103388, 9837316888 E-mail: mrt.vinay74@gmail.com

> Printed by: Navneet Printers Tej Garh, Garh Road, Meerut, Meerut 08126468275

*All Research Papers/Articles pubished in this journal received through E-mail

ISSN 0975-0797



JOURNAL OF EDUCATION & PEDAGOGY

(A Peer Reviewed Refereed International Research Journal) Volume-XIV, No. 2, Dec. 2022 **Published Biannually**

By National Educationist Council

CONTENTS

1.	Key Performance Indicator for Evaluating Tools in Distance Education Mehmet Ali Balci, Ömer Akgüller, Nataliia Rzhevska, Irina Dobroskok & Igor Mikityuck	1-13
2.	Online Mode of Teacher Education in Context of Indian Education System: An Overview Amit Gautam & Anshula Dua	14-20
3.	Preference based Analysis on Online Course Structure of Research Methodology using Conjoint Method Sanjib Kumar Gupta	21-30
4.	Inclusion of the Tribals for Educational, Social and Economic Equity through an Innovative Multilingual Approach Shilpa Raghuvanshi Chauhan	31-41
65.	India National Education Policy (NEP) 2020 Gedam Kamalakar	42-56
6.	Professional Learning Needs and Development in Teachers in Telangana State: A View Naveen Verpula	57-68
7.	A Study of Male and Female Students of Secondary Schools in terms of Level of Aspiration	69-75

Harendra Singh

FUNDAMENTAL DUTIES OF INDIAN CITIZEN

- 2 To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- 2 To cherish and follow the noble ideals which inspired our national struggle for freedom;
- 2 To uphold and protect the sovereignty, unity and integrity of India;
- 2 To defend the country and render national service when called upon to do so;
- 2 To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- 2 To value and preserve the rich heritage of our composite culture;
- 2 To protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- 2 To develop the scientific temper, humanism and the spirit of inquiry and reform;
- 2 To safeguard public property and to abjure violence;
- 2 To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavor and achievement.

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 1-13

Key Performance Indicator for Evaluating Tools in Distance Education

Mehmet Ali Balci*, Ömer Akgüller**, Nataliia Rzhevska***, Irina Dobroskok**** & Igor Mikityuck****

ABSTRACT

The article discusses the issue of managing the efficiency of the learning process in the context of using ICT platforms in the situation of stressful transition to distance learning during COVID-19 pandemic. The following key performance indicators (KPIs) were distinguished in terms of teacher-student interaction: ease of service accessibility, quality of service accessibility, use of multimedia services, quality of education, promotes student learning, uses rigorous instructional strategies, level of technical competence, ensuring quality content delivery by making accessible academic and technical advisers, level of student satisfaction, level of interactivity and feedback, level of collaboration and motivation to study, level of technical competence, self-assessment. Suggested KPIs were used to analyze the efficiency of three distance learning platforms utilized at Mu?la S?tk? Kocman University (Mu?la, Turkey) and State Higher Educational Institution Pereiaslav-Khmelnytskyi Hryhorii Skovoroda State Pedagogical University (Pereiaslav, Ukraine). During the educational analysis, five-point Likert scale and ANOVA systems were used. Study results have a practical application as suggested KPIs may become indicators for testing platforms, ICT tools for effective interaction between the teacher and the student in the course of distance learning. The data obtained allow suggesting that platforms received an almost equal number of points, and the level of interaction efficiency is determined by the experience in using the tested platforms, shaping information competencies. Key performance indicators of platforms, tools, software products that are

^{*} Mugla Sitki Kocman University, Faculty of Science, Department of Mathematics, Mugla, Turkey, mehmetalibalci@mu.edu.tr

^{**} Mugla Sitki Kocman University, Faculty of Science, Department of Mathematics, Mugla, Turkey, oakguller@mu.edu.tr

^{***} State Higher Educational Institution, Pereiaslav-Khmelnytskyi Hryhorii Skovoroda State Pedagogical University, Pereiaslav-Khmelnytskyi, Ukraine zolotysya@ukr.net

^{****} State Higher Educational Institution, Pereiaslav-Khmelnytskyi Hryhorii Skovoroda State Pedagogical, University, Pereiaslav-Khmelnytskyi, Ukraine, ORCID ID 0000-0002-3937-8428 irina.dobroskok@gmail.com

^{*****} Department of finance, Kyiv National University of Trade and Economics, Kyiv, Ukraine mikityuck@ukr.net

Key Performance Indicator for Evaluating Tools in Distance Education

used for distance learning help compare and choose the most effective ones, taking into account individual characteristics of information interaction and perception. Therefore, the study and highlighted KPIs can be used to personalize lifelong learning in the future. **Key words:** Distance Education Tools, Key Performance, Covid-19, Evaluation Methodology

Introduction

Today, distance learning is rapidly displacing conventional learning. Each of us is trying to find the best platforms and forms of interaction in higher education. There are a lot of modern tools for working in the information space, BUT have we thought about performance indicators of the chosen tool?! In this research paper, we offer a look at the tools for distance learning from the standpoint of quality management of the educational process. To do this, we use KPI technology in distance education scenarios. The paper discusses the cases of Mugla Sitki Kocman University and State Higher Educational Institution Pereiaslav-Khmelnytskyi Hryhorii Skovoroda State Pedagogical University" that has transformed the educational process from the traditional to online learning in several days. It also explains which KPIs have been identified to determine the best platforms for organizing distance learning. Distance learning can be useful in the aftermath of a pandemic, especially for students with special needs.

The problem statement According to UNESCO monitoring, as of 17 April 2020, approximately 11,575,270,054 learners have been affected due to schools closing in response to the pandemic; 191 countries have closed schools nationwide and 5 locally impacting about 91.3% of the world's student

population (UNESCO, 2020). According to UNESCO, on 1 April 2020, schools and higher education institutions (HEIs) were closed in 185 countries, affecting 1,542,412,000 learners which constitutes 89.4% of the total number of enrolled learners. The coronavirus pandemic has brought to light the following increasingly critical factors in the distance education: non-traditional studies are rapidly becoming a major element of the higher education; increased diversity of educational opportunities; increased number of unique environments where educational opportunities are offered; increased recognition of the need for library resources and services at locations other than main campuses; increased concern and demand for equitable services for all students seeking higher education, no matter where the "classroom" may be; greater demand for library resources and services by faculty and staff at distance learning sites; and an increase in technological innovations for information transmission and course delivery (ACRL Distance Learning Section Guidelines Committee).

In the field of education, for more than a decade now, universities and academic institutions have been investing in e-learning methodologies and technologies and offering services for adult distance education using information computer technology tools and learning management systems.

Journal of Education & Pedagogy

Now that the pandemic has shaken the world, it is important to immediately focus on effective educational communication technologies, specific tools for measuring the educational process effectiveness remotely. The novel coronavirus disease 2019 (COVID-19), caused by the Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), has been in the midst of worldwide panic and global health concern since December 2019 (Vellingiri, 2020).

The COVID-19 pandemic has changed the educational process in educational institutions. On the one hand, everyone understood that the virus risk would affect every country, but quarantine measures brought the education system to a standstill. Therefore, it took the governments of Turkey and Ukraine about a week to standardize the educational system and introduce elements of distance learning. Such critical transition and implementation of distance learning elements have become a challenge for many educational systems.

On the one hand, teachers today are mostly computer educated. Besides, we live in the era of the Internet, so one can be instructed to get the administrative work done from home. Also, the available time can be utilized by the institutions to provide teachers with free access to some paid e-learning platforms or academic article databases allowing them to use these systems from home. Free online faculty development programs and conferences can be arranged (Bhat, 2020).

On the other hand, it is important to measure their performance, especially when

such a transition takes place in the situation of a crisis. Most discussions revolve around the information support of distance learning elements: platforms for cooperation, forms of interaction, formulas for measuring effectiveness, and so on. Teachers and students found themselves in a difficult situation as in the pre-crisis period (before the quarantine) they did not make much use of distance learning. This is especially true for students from rural areas. The variety of software products, forms of communication (online, offline), types of interaction (video recording of the educational material, online lecture, audio lecture, etc.) require many attempts to assess the effectiveness of the joint work between the teacher and students. This is especially true when this work was the result of an instant change in the organization of the educational process.

The important pedagogical concept in distance learning is Learning Centered Education (LCE). Essentially, a learning partnership is created where the teacher determines what needs to be learned and the students help determine how their learning is going. The concept is effective because it implies that there are commitments on both sides of this partnership; the teacher helps and the student participates. (Discenza, 2003).

Distance education is defined as creating a learning environment that fosters structured learning without the traditional practice of faceto-face interaction in a campus setting. During the pandemic, information and communication technologies and systems also entered into a training partnership. Their choice is determined by many factors and scenarios: from the choice of the administration to the use of tools convenient for each individual participant to the educational process. In this aspect, it is important to clarify on what criteria the choice of using certain ICT products is based and how these criteria are calculated.

It is also necessary to explain whether there is a correlation between the effectiveness of distance learning and the use of criteria for evaluating the effectiveness of ICT products. The problem of the effectiveness of interactive distance learning was raised even before the pandemic S. Catherine Cavanaugh. Because distance learning is often a costly and timeconsuming process to establish and maintain, it is important to know if certain tools, platforms, or methodologies are truly improving student achievement. The author is convinced that it is also critically important to know which distance learning methods and techniques are more effective so that students can get the most out of society's investment in distance learning technologies. Faced with so many new and rapidly changing opportunities, educational institutions need data to make quality distance learning decisions. (Cavanaugh, 1999). Quality decisions must be based on well-defined criteria and indicators. Only then will their quality be high.

Rovai describes the peculiarity of the transition to distance education, when the pedagogical paradigm of information pedagogy is not taken into account, which is necessary to improve the efficiency and effectiveness of online learning (Rovai, 2003).

In terms of the effectiveness of specific ICT tools for a remote educational ecosystem,

the study by M. Thompson and M. Irele is important as it explores the concepts of "quality" and "efficiency" in distance education. The term "quality" is commonly used to refer to the characteristics and processes of a program (technology infrastructure, student services, etc.), while effectiveness mainly refers to outcomes (learning outcomes, participant satisfaction, etc.). The assessment points of the program should contain both the level of knowledge. The level of employment of graduates (to assess the effectiveness of the program), but also the assessment of the effectiveness (time, resource-intensive, reflective) use of tools in distance learning (Thompson, 2003). However, it is important to take into account the studies that were carried out during the pandemic to understand the real state of the stress transition to distance learning, not as a form, but as a condition for further implementation.

Specific criteria and indicators are needed to conduct this assessment. And it is important to use them systematically when assessing the progress of the distance learning process. An important study is the research article by G. Basilai and D. Kvavadze, in which the authors examined the case of one private school, which in just a few days transformed the educational process from traditional to online learning, and focused on the results of the first week of training online education. In the learning process in Georgia, two platforms are used - EduPage and Gsuite for Education. Several alternatives have been discussed and used, which include communication solutions such as Zoom and Google Meet. The authors analyzed them in terms of academic performance (before and during the pandemic) and student engagement (Basilaya, Kvavadze, 2020). Assessment and evaluation as specific indicators of student achievement are considered as problematic issues of the educational process in the study by S. Timmis et al. (Timmis, Broadfoot, Sutherland, Oldfield, 2016), A. Raaheim et al. (Raaheim et.al., 2018), LR Kearns (Kearns, 2012)., G. Watson, J. Sottile (Watson, Sottile, 2010); indicators and criteria for the effectiveness of ICT tools and platforms have been insufficiently studied. This may be due to several reasons: the lack of alternatives (availability of a specific licensed version), the difficulty of using parallel and / or additional ICT platforms and tools, the stressful transition to distance learning, and the lack of developed criteria and indicators for assessing the effectiveness of ICT platforms and tools.

He research goal is to determine components that affect the effectiveness of the educational process and criteria for assessing it in the course of stressful implementation of distance learning elements in the educational process based on the example of the Universities of Turkey and Ukraine. In the situation when the strategy of effective educational process management is also moved to the online mode, it is important to identify possible digital tools for managing the educational process outputs during a crisis implementation of distance learning elements. Teachers evaluate student performance, but it is also important to assess the progress using different technology platforms and software

Methodology and Findings

We presented KPIs in two blocks: the assessment of tools in distance learning (technological characteristics) and Efficiency (the level of competence formation and student reflection).

Assessment will be made in three categories: Tools for Disability Education, Teacher, and Student. Tools for Distance Education section consists of 4 different subsections, such as KPI 1, KPI 2, KPI 3 and KPI 4; Teacher section consists of 4 subsections, such as KPI 5, KPI 6, KPI 7 and KPI 8. Finally, the Student section consists of 5 different subsections: KPI 9, KPI 10, KPI 11, KPI 12 and KPI 13. Each section is evaluated with a maximum of 100 points. KPI subsections also get a total score of 100 points. Assessments that users will make for each category in each KPI are represented with a letter p. Here, p can take the following values: p=0, 1, 2, 3, 4, 5 - from bad to good, reflecting personal evaluation. 0 indicates the lowest rating and 5 points to the highest rating. In addition, subsection values for each KPI showing their importance in the KPI assessment are marked in the table below with . It is clear that if p-value, which indicates the evaluator's rating, is 0, the KPI score will be zero. If the p-value is anything but zero, (p/5)value is used to calculate the percentage of positive assessments.

Key Performance Indicator for Evaluating Tools in Distance Education

	TOOLS FOR DISTANCE EDUCATION p=0,1,2,3,4,5, w: weight of each part of the KPI (%), P=points of KPI						
KPI 1	Ease of service accessibility Access time ($\mathbf{W}_1 = 60\%$) Number of clicks/links ($\mathbf{W}_2 = 40\%$)	25 points	$P = \left(\sum_{i=1}^{2} \left[\frac{p_i}{5} * w_i\right]\right) * 25$				
KPI 2	 Quality of service accessibility a. User-friendly interface (W1 = 25%) b. Use of secure protocols (documented technology plan that includes electronic security measures, i.e., password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information (W2 = 25%) c. Cross-platform capability. (W3 = 25%) d. Ensure sufficient technical support. (W4 = 25%) 	25 points	$P = \left(\sum_{i=1}^{4} \left[\frac{p_i}{5} * w_i\right]\right) * 25$				
KPI 3	 Use of multimedia services 1. Use of audio and video plug-ins (W1 = 30%) 2. Use of videoconferencing. (W2 = 35%) 3. Use of blog or forum for sharing and comparing. (W3 = 35%) 	25 points	$P = \left(\sum_{i=1}^{a} \left[\frac{p_i}{5} * w_i\right]\right) * 25$				
KPI 4	 Quality of education Student academic grades (𝗤₁ = 10%) Improves the speed of acquiring new knowledge and skills (𝗤₂ = 15%) Improved learning efficiency (𝗤₃ = 15%) The number of requests for additional courses (𝗤₄ = 10%) Learning tracks are clearly defined (𝗤₅ = 15%) Presence of detailed syllabus and prerequisites for all courses (𝗤₄ = 10%) Availability and quality of electronic reference library (𝗤₅ = 15%) Timely feedback to participants. (𝗤₅ = 10%) 	25 points	$P = \left(\sum_{i=1}^{8} \left[\frac{p_i}{5} * w_i\right]\right) * 25$				
Total		100					

Table-1: KPI evaluation for tools of distance education

EFFIC	IENCY		
Teacher			
KPI 5	Promotes student learning. ($\mathbf{W_1} = 100\%$)	25 points	$P = \left(\frac{p}{5}\right) * 25$
KPI 6	Uses rigorous instructional strategies (e.g. modelling, demonstrating, thinking aloud, etc.) W1 = 100%)	25 points	$P = \left(\frac{p}{s}\right) * 25$
KPI 7	Level of technical competence. $\mathbf{w_1} = 100\%$)	25 points	$P = \left(\frac{p}{5}\right) * 25$
KPI 8	Ensuring quality content delivery by making academic and technical advisers accessible who can assist students throughout the program duration Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voicemail and/or e-mail. ($\mathbf{w_1} = 15\%$) Feedback to student assignments and questions is constructive and provided in a timely manner. ($\mathbf{w_2} = 15\%$) Students are instructed in the proper methods of effective research, including. ($\mathbf{w_3} = 15\%$) Students have access to sufficient library resources that may include a "virtual. library" accessible through the World Wide Web. ($\mathbf{w_4} = 20\%$) Faculty and students agree upon expectations regarding times for student. ($\mathbf{w_5} = 15\%$) Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness. ($\mathbf{w_6} = 20\%$)	25 points	$P = \left(\sum_{i=1}^{6} \left[\frac{p_i}{5} * w_i\right]\right) * 25$
Total		100	
Student	:		
KPI 9	Level of student's satisfaction ($W_1 = 100\%$)	20 points	$P = \left(\frac{p}{5}\right) * 20$

KPI 10	Level of interactivity and feedback ($w_1 = 100\%$)	20 points	$P = \left(\frac{p}{s}\right) * 20$
KPI 11	Level of collaboration and motivation to study $(w_1 = 100\%)$	20 points	$P = \left(\frac{p}{5}\right) * 20$
KPI 12	Level of technical competence ($W_1 = 100\%$)	20 points	$P = \left(\frac{p}{5}\right) * 20$
KPI 13	Self-assessment (aims at allowing the learner to summarize their learning from the courses for that semester) The degree of interest in major knowledge learned ($\mathbf{w_1} = 10\%$) Thinking about questions ($\mathbf{w_2} = 10\%$) Competence in analyzing and solving relevant practical problems ($\mathbf{w_3} = 15\%$) Competence in discussion and communication with others ($\mathbf{w_4} = 15\%$) Initiative in acquiring information ($\mathbf{w_5} = 10\%$) Competence in independent learning ($\mathbf{w_6} = 10\%$) Understanding and memorization of essential theory in the subject ($\mathbf{w_7} = 15\%$) Basic skills in the subject ($\mathbf{w_8} = 15\%$)	20 points	$P = \left(\sum_{i=1}^{9} \left[\frac{p_i}{5} * w_i\right]\right) * 20$
Total		100	

Key Performance Indicator for Evaluating Tools in Distance Education

The survey used a five-point Likert scale to measure the quality based on the following indicators: excellent (5), good (4), fair (3), poor (2), very poor (1). In addition, the "I do not know" (0) category was added, since it can be expected that some students are not sure what to answer.

- N: the number of KPIs in the section, m: the number of categories in each KPI in respective sections,
- w_i: the weight of each category in each KPI
- p_i: evaluation score of each category in each KPI

TP: the total score given by the evaluator for each section

According to the data above, the score of each KPI is calculated with the formula below:

Points of KPI =
$$P = \left(\sum_{i=1}^{m} \left[\frac{p_i}{5} * w_i\right]\right) * \frac{100}{N}$$

The sum of scores of KPIs within each section shows the total score given by the evaluator to that section.

For N = 4, m = 2, the evaluator score for Tools for Distance Education section is calculated with the formula below. Journal of Education & Pedagogy

$$TP = \left(\sum_{i=1}^{2} \left[\frac{p_i}{5} * w_i\right]\right) * 25 + \left(\sum_{i=1}^{4} \left[\frac{p_i}{5} * w_i\right]\right) * 25 + \left(\sum_{i=1}^{3} \left[\frac{p_i}{5} * w_i\right]\right) * 25 + \left(\sum_{i=1}^{3} \left[\frac{p_i}{5} * w_i\right]\right) * 25$$

With N = 4, the assessor score for the Teacher section is calculated with the formula below.
$$TP = \left(\sum_{i=1}^{1} \left[\frac{p_i}{5} * w_i\right]\right) * 25 + \left(\sum_{i=1}^{1} \left[\frac{p_i}{5} * w_i\right]\right) * 25 + \left(\sum_{i=1}^{1} \left[\frac{p_i}{5} * w_i\right]\right) * 25 + \left(\sum_{i=1}^{5} \left[\frac{p_i}{5} * w_i\right]\right) * 25$$

With N = 5, the evaluator score for the Student section is calculated with the formula below.

$$TP = \left(\sum_{i=1}^{1} \left[\frac{p_i}{5} * w_i\right]\right) * 20 + \left(\sum_{i=1}^{1} \left[\frac{$$

Discussions and Conclusions

UNESCO offers a variety of platforms and software products for distance learning. Digital learning management systems include CenturyTech, ClassDojo, Edmodo, Edraak, EkStep, Google Classroom, Moodle, etc. Collaboration platforms that support live video communication are DingTalk, Lark, Hangouts Meet, Teams, Skype, WeChat Work, Zoom. Tools for teachers to create digital learning content: Thinglink, Buncee, EdPuzzle, Kaltura, Nearpod, Pear Deck, Squigl, Trello (UNESCO).

In this hard period, public schools received support from large companies such as Microsoft, Google, Zoom, and Slack that are offering many of their product features for free. Microsoft is offering anyone its premium version of Teams for free for six months and lifted existing user limits. Google has announced that it was offering its enterprise video conferencing features, such as larger meetings up to 250 people and recording functionality, for free to G Suite and G Suite for Education customers by July 1, 2020. Upon request, Zoom has lifted the time limit of video calls in China, Japan, Italy and the US (Basilaia, Kvavadze, 2020).

In the study, we used collaboration platforms that support live video communication. The use of video conferencing is strongly recommended to help counteract the stress of social isolation that such a crisis can cause because of social distancing recommendations (Schwartz et. al., 2020). Therefore, at each lesson, a video call between the teacher and students was organized (regardless of the form of lesson organization (lecture, practical class/seminar, advisory lesson forms, etc.). After the video call, the teaching staff can include interactive tasks with lecture presentations, thematic conferences or question and answer sessions.

The main characteristics that were shared by both universities are presented below:

- Daily interactive training sessions under the guidance of a teacher/tutor/mentor, designed for 1 hour of active interaction and 20 minutes of individual/group tasks on a predetermined and planned topic.
- 2. Mandatory use of additional ICTs and tools to create digital learning content and the formation of skills needed for it. This is an important sustainable development goal. By 2030, the number of youth and

adults with relevant skills, including technical and vocational skills, needed for employment, jobs decent and entrepreneurship will increase substantially. The proportion of youth and information adults with and communication technology (ICT) skills, by type of skill.

- 3. Evaluation of used platforms at the end of the month using the online questionnaire.
- 4. Creating a corporate email address where students can send their wishes, recommendations for teachers and the administration regulating the educational process.
- 5. Organization of self-study (homework, including group research projects) by providing students with the opportunity to freely choose platforms and ICT tools for performing and presenting work results.

An important feature of this study must be highlighted. It concerns the stressful transition to distance learning during a pandemic. When testing the X platform, teachers used teaching methods just as if it was conventional training within the walls of an educational institution. This is due to the fact that management and teaching staff did not have enough time to direct the teaching potential of employees so that they could easily switch to online training. The development of new pedagogical models took time and could be implemented using Y and Z platforms.

The research was conducted from April 2020 to June 2020 with a total of 50 students and 20 teachers from the University named after Grygoriy Scovoroda in Pereiaslav and Mu?la S?tk? Koçman University and 55 students and 20 teachers from S?tk? Koçman University (Turkey).

In April, we tested platform X for distance collaboration (Table 2).

At the end of May, we tested platform Y (Table 3).

At the end of June, we tested platform 3-d Z during the pandemic (Table 4).

The peculiarity of the first stage was that students and teachers had no experience in using distance learning as an integrated educational ecosystem. At the second stage, teachers and students already had experience and could compare it with previous platforms.

The research methodology was characterized by the fact that in the process of the second stage, a follow-up survey was conducted concerning the use of the first platform. This allowed comparing distance learning skills of students and teachers for all platforms.

Ukrainian

2.12308

	DF	Sum of Squares	Mean Square	F Ratio	p-value
Model	1	0.0753846	0.0753846	2.61915	0.118649
Error	24	0.690769	0.0287821		
Total	25	0.766154		-	
				All	2.17692
			Cell Means	Turkish	2.23072

Table-2: ANOVA results for platform X

2.23077

Journal of Education & Pedagogy

	DF	Sum of Squares	Mean Square	F Ratio	p-value
Model	1	2.58615	2.58615	67.5779	< 0.001
Error	24	0.918462	0.0382692		
Total	25	3.50462		-	
				All	2.54615
			Cell Means	Turkish	2 86154

Table-3: ANOVA results for platform Y

Table-3: ANOVA results for platform Z

	DF	Sum of Squares	Mean Square	F Ratio	p-value
Model	1	4.56962	4.56962	38.8691	< 0.001
Error	24	2.82154	0.117564		
Total	25	7.39115		-	
				All	3.02692
			Cell Means	Turkish	3.44615
				Ukrainian	2.60769

This unplanned and unprepared experiment led to the capacity building in staff and teachers who studied and tested new tools and systems for distance learning. The acquired skills of stressful transition to the remote education will forever remain in the memory of the administrative, teaching staff and students. The Covid-19 pandemic turned the entire planet's life upside down forcing us to re-evaluate the concepts of life, health, family, well-being, and quality. Teachers who were able to revise the pedagogical model of educational process organization and implement it in the distance learning format from the perspective of methodology and didactics will be able to keep applying distance learning methods

One of the main achievements of the administrative and teaching staff in the future will be providing students with the opportunity to use platforms that are convenient and effective for everyone, which will allow them to personalize the educational process.

Ukrainian

This study is important for the future, as it provides an example of countries and universities that have been forced to switch to distance learning in under stressful circumstances. During the pandemic, all universities revised their long-term and shortterm strategies in order to adapt them to possible unforeseen factors. Therefore, it is possible that a change in thinking is taking place and that this experience has opened a new horizon of opportunities for teaching, learning, and revising the possibilities of the technical infrastructure and information solutions. Ultimately, it will also expand the opportunities for remote working and the ability for students to access lifelong learning opportunities.

The study allows us to conclude that the concept of the distance learning quality provided in response to an emergency varies greatly depending on clearly developed and voiced key performance indicators. The availability of technical infrastructure is a prerequisite for ensuring adequate distance learning.

Conflict of interests

The authors declare no conflict of interest.

References

- ACRL Distance Learning Section Guidelines Committee. (2019). ACRL STANDARDS & GUIDELINES: Guidelines for distance learning library services: A draft revision. College & Research Libraries News, 64(4), 265-271.
- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 coronavirus (COVID-19) pandemic in Georgia. Pedagogical Research, 5(4), 1-9.
- Bhat, R., Singh, V. K., Naik, N., Kamath, C. R., Mulimani, P., & Kulkarni, N. (2020). COVID 2019 outbreak: The disappointment in Indian teachers. Asian Journal of Psychiatry, 50, 102047.
- Cavanaugh, Catherine S. The Effectiveness of Interactive Distance Education Technologies in K-12 Learning: A Meta-Analysis. PUB DATE 1999-03-00
- Discenza, R., Howard, C., & Schenk, K. (Eds.). (2003). The design and management of effective distance learning programs. IGI Global.
- Kearns, L. R. (2012). Student assessment in online learning: Challenges and effective practices. Journal of Online Learning and Teaching, 8(3), 198.
- Raaheim, A., Mathiassen, K., Moen, V., Lona, I., Gynnild, V., Bunæs, B. R., & Hasle, E. T. (2018). Digital assessment-how does it challenge local practices and national law? A Norwegian case study. European Journal of Higher Education.
- Rose, S. (2020). Medical student education in the time of COVID-19. Jama.
- Rovai, A. P. (2003). A practical framework for evaluating online distance education programs. The Internet and Higher Education, 6(2), 109-124.
- Schwartz, A. M., Wilson, J. M., Boden, S. D., Moore Jr, T. J., Bradbury Jr, T. L., & Fletcher, N. D. (2020). Managing resident workforce and education during the COVID-19 pandemic: evolving strategies and lessons learned. JBJS Open Access, 5(2), e0045.
- Thompson, M. M., & Irele, M. E. (2003). Evaluating distance education programs. Handbook of distance education, 567-584.
- Timmis, S., Broadfoot, P., Sutherland, R., & Oldfield, A. (2016). Rethinking assessment in a digital age: Opportunities, challenges and risks. British Educational Research Journal, 42(3), 454-476.
- UNESCO report: 290 million students out of school due to COVID-19: UNESCO releases first global numbers and mobilizes response. Retrieved April 17, 2020, from UNESCO: https://

Journal of Education & Pedagogy

en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes

UNESCO: Distance learning solutions https://en.unesco.org/covid19/educationresponse/solutions

- Vellingiri, B., Jayaramayya, K., Iyer, M., Narayanasamy, A., Govindasamy, V., Giridharan, B., Rajagopalan, K. (2020). COVID-19: A promising cure for the global panic. Science of the Total Environment, 138277.
- Watson, G. R., & Sottile, J. (2010). Cheating in the digital age: Do students cheat more in online courses?.

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 14-20

Online Mode of Teacher Education in Context of Indian Education System: An Overview

Amit Gautam* & Anshula Dua**

ABSTRACT

e-learning plays a vital role in the present technological era as it leads to the development of an individual along with the nation. The concept of e-learning was evolved in late 90's by keeping in mind the objective of enhancing knowledge of people through usage of interactive tapes and other external devices (Vora, 2020). Due to its flexible nature, the demand of e-learning has been increasing day by day. Conventional learning doesn't necessarily gives us the required outcome i.e. quality education. Also conventional learning doesn't allows teachers to be present at different places at the same time. Therefore, e-learning can remove the barriers which are created in conventional learning. e-learning leads to intellectual development of an individual (Vivekananda, 2017). Conventional learning has its own drawback such as limited to classroom, time boundation, limited learning etc. Country like India which is democratic in nature has its strength in people. In country like India, e-learning is said to be as a boon and plays a vital role in developing critical thinking skills among the citizens. In this context, the entire focus has been given on development and implementation of new methodologies in context of technology such as gamification, mobile e-learning, cloud based e-learning, micro learning, internet of things etc.

Key words: e-learning, Conventional Learning, Gamification, Mobile e-Learning, Cloud Based e-Learning, Micro Learning, Internet of Things (IoT)

Introduction

Online education provides access to world class learning experience but on the other hand conventional mode of teaching cannot provide such experiences due to time, financial and personal constraints. Country having huge population such as India needs to have online education in a formal mode. In present context, India is acting as a home to many developed countries which are using different technologies. The term e-learning is also coined as "virtual learning" or "online learning". In layman terms, when we make the use of electronic devices for the purpose of learning it is said to be as e-learning. The

^{*} Assistant Professor, Faculty of Education, Dayalbagh Educational Institute, Agra (U.P.) India Email: amitg50@gmail.com

^{**} Junior Research Fellow, Faculty of Education, Dayalbagh Educational Institute, Agra (U.P.) India Email: anshuladua19@gmail.com

Online Mode of Teacher Education in Context of Indian Education System: An Overview

use of electronic devices can be used to deliver a lecture or an entire course in schools and colleges, and that too in part or full distance learning course. e-learning is a boon at every level whether it's for individual or for society, as learner can conveniently learn at their own pace by making use of electronic devices such as smart phone, tablet, mobile phone. The replication of physical books and physical library is done through the information provided on the internet. World class resources are provided to the learners which will provide them the benefit at their own phase of learning. According to Vora (2020), advantages of elearning are as follow:

- 1. Communication- e-learning provides the opportunity to learners and teachers to communicate with each other and enhance their communication relation.
- Virtual space- It provides virtual space to learners, members and experts to meet and discuss on various issues and topics.

- 3. Accessibility- e-learning provides 24/7 accessibility to course materials.
- 4. Access to information- Leaners can access information that is available on the database or university internet.
- 5. Training- Learners can be provided right sort of training at the right time which will be beneficial for them in near future.
- 6. Approach- e-learning makes use of learner centred approaches.
- 7. Administration- It reduces administration around the various courses.

Implementation of Online Teaching-Learning in Higher Education Institutions (HEIs)

Due to COVID-19, online teaching learning is massively employed, therefore it became a massive challenge for different stakeholders. These challenges are needed to be addressed for making each stakeholder technological competent as per present scenario.



Figure 1- Represents the conceptual model of the implementation process of online teaching-learning **Source:** Adapted from (Speck, 1996)

Journal of Education & Pedagogy

According to Mishra et al. (2020), the implementation of e-learning in the field of higher education begin with UGC, MHRD and university and colleges initiatives. Motivation plays a vital role in adoption of E-learning for fulfilling needs of learner. Various software's and educational apps were embedded in HEIs such as, ZOOM, Google Meet, Cisco WebEx etc. Keeping in mind the need of hour, Government of India implemented online education across the country. To work during pandemic, teachers prepared themselves so as to work independently in online mode.

Review of Related Literature

The impact of e-learning can be observed, as in recent decades it has taken its shape that has made a huge impact on stakeholders. The conventional mode of learning has been completely changed due to this learning technique. In the field of elearning there are various articles and research paper that are referred in the reference section. For instance, FengWeng et al.(2010), suggests that most difficult things becomes more easy to learn and remember for very long time when simulated games on computers are played by learner in the process of e-learning. Tubaishat & Lansari (2011), concluded that students have very high acceptance to e-learning in their regional institutions. Ibanez et al. (2014), concluded that the gamification plays an effective role in engaging the students in learning activities. It also has positive effect on knowledge acquisition. Further author suggests that same gamification technology can be used for similar other programming learning for the students. Jain et al. (2014), concluded that Artificial Intelligence-Based Student

Learning Evaluation Tool (AISLE) reduces the time involved in assessing a student understanding of a particular topic and it also helps instructor to compare variability of understanding among learners.

In the field of e-learning, various technologies are emerging in teaching-learning practices. Therefore, it is relevant to explore the recent trends in online mode of teacher education. To answer these questions, we set out to conduct a systematic review of research related to e-learning: What are the emerging trends in online mode of teacher education? How the emerging technologies will be beneficial for stakeholders? The goal of our research was to identify the emerging trends in online mode of teacher education, and to provide ideas to other researchers on future research topics, as well as issues for further exploration. In order to accomplish this, we conducted a systematic review of articles published in the last decade. Hence, researcher has further discussed about the emerging trends in online mode of teacher education.

Scope of the Study

The article is based on the author's study and review of related literature. The inferences and suggestions presented here are based on opinions and perspectives from the author's experience and what was gathered from the literature.

Objectives of the Study

- 1. To find out the emerging trends in online mode of teacher education
- 2. To find out the benefits of online mode of teacher education

Online Mode of Teacher Education in Context of Indian Education System: An Overview

3. To give some suggestions and recommendations for the success of e-learning

Methodology

The research tool used for analyzing the data is content analysis and the research method is descriptive research. The qualitative aspects of the research study is taken into consideration. This study is completely based on the secondary data. A systematic review was done for the collected literature. Secondary sources of data used are (a) journals, (b) reports, (c) search engines, (d) scholarly articles & (e)research papers.

Emerging Trends on Online Mode of Teacher Education

There are enormous technological trends of e-learning in present scenario. In the present time, everyday some new trend is emerging and flourishing to provide good learning techniques to the learner, among the popular technological e-learning trends these are some listed:

1. Mobile Learning: Stakeholders can learn by making use of personal pocket devices such as mobile phone's and smart phones. The gadgets and devices with the connectivity of internet can be used for the purpose of e-learning. In present era, everyone has mobile phone which can be used in a desired way. They are portable in nature as they walk with the user and can carry them without any hurdle. Mobile plays a vital role in making e-learning a successful venture in India and in other developed nations. Mobile learning has the following benefits:



Figure 2- Benefits of Mobile Learning

2. Micro Learning: It is used in case of providing the content in small groups. In micro learning learners are in control in context of what they are learning. These are designed in rich format which are learner centric but on the other hand provides training that is available on various devices. It is ensured that the material is easily accessible and applied by the learners. Micro learning has the following benefits:



Figure 3 - Benefits of Micro Learning

Journal of Education & Pedagogy

3. Cloud Based E-Learning- It leads to creation of ripples in the file of education. The user can log in and can have access to learning systems which are hosted on the internet. The instructor will upload the course content by using internet browser. Instead of uploading the course content on learner's computer it is uploaded on learning management system in which the creator has the ability to store the data and others (approved users) can have access to it. Benefits of cloud based elearning are as follow:





4. Gamification: The studies have shown that gamification is useful for learners to comprehend and apply new knowledge. It is done through program and also depends upon learner's choice. Gamification creates interest among the students and encourage them to do the task again and again. It not only helps the learner to acquire knowledge and skills but also provides them the opportunity to retain their knowledge in long run. Benefits of Gamification in elearning are as follow:





- 5. Adaptive E-Learning: In adaptive elearning, computers are used as interactive devices for teaching. As per the required learning needs these methodologies arrange the allocation of different resources for each learner. Therefore, it is known as intelligent tutoring and the origin of it is artificial intelligence. The use of adaptive elearning is made for distance learning and group collaboration. Adaptive e-learning is used in the following areas:
- * Computer Adaptive Testing
- * Adaptive Hypermedia
- * Intelligent Tutoring Systems

Benefits of adaptive e-learning are: it acts as a rich resource, time saving and helps tutors in tracking their learner.

6. Augmented Reality: It is related with mediated reality. Augmented reality is said as a boon technology for learners in present time. Whenever a person sees something in real world they can find out the information regarding it with the help

Online Mode of Teacher Education in Context of Indian Education System: An Overview

of mobile phones. In Augmented reality we need device, internet and software of augmented reality. It was introduced in the year 1962. Example of augmented reality is Google Glass. Deep learning of things can easily be done with the help of augmented reality. Huge collection of database can also be created with the usage of augmented reality.

7. Virtual Resources: The learner can learn by watching the videos. Whenever we want to get some idea regarding a topic we usually search the particular topic on YouTube. Therefore, this type of learning provides us knowledge through multimedia effects. Example of video e-learning are YouTube, CD's and TV, and these kind of resources saves our time as instead of reading whole content on the internet we learn by watching videos. Benefits of virtual resources are as follow:



Figure 6 - Benefits of Virtual Resources

8. Artificial Intelligence: AI is said to be an intelligent software which helps us in taking intelligent actions and acts as an instructor for each student. We can take example of SIRI, as it answers our

queries. AI helps us in taking quick decisions along with it provides us quality resources. AI in the field of education is helpful as it provides expertise to learners and leads to automated teaching.

National Education Policy, 2020 and Emphasis on Online Mode of Teacher Education

For the purpose of arranging the building of digital infrastructure, a dedicated unit will be created in the Ministry to look after the eeducation needs of different education level. Since technology is rapidly changing, it is need of the hour to encourage an ecosystem that creates solutions for solving India's challenges of scale, equity and evolve as per the rapid changes in technology.

Findings and Conclusion

Customized learning can be done with the help of e-learning as it is adaptive and personalized in nature. To enhance teachinglearning process one can adopt e-learning platform. Recent researches indicate that educational material becomes handy with these technology which are helpful for teachers as well as for learners. e-learning is beneficial to the following stakeholders:

- a) Beneficial for Individual/Learner- elearning is beneficial for learner as it saves time and money of individual. It provides easy access to learning material and these learning resources are free in its nature. Secondly, learners can learn at their own phase and such technology turns up whole future of education.
- b) Beneficial for Teacher- A lot of time of a teacher can be saved and it acts as a boon for teachers as it helps them in

dealing with stressful condition such as repetitive classes.

- c) Beneficial for Society- The society can take benefit of e-learning to the maximum extent as e-learning can reach out to any part of the world.
- d) Beneficial for Nation- When learner acquires latest skills through e-learning it will lead to increase competitiveness and employment by making the nation more attractive to foreign investments and also fostering a business or an entrepreneurial venture.

References

- Ibanez, M.-B., Di-Serio, A., & Delgado-Kloos, C. (2014). Gamification for Engaging Computer Science Students in Learning Activities: A Case Study. IEEE Transactions on Learning Technologies, 7(3), 291-301. https://doi.org/10.1109/tlt.2014.2329293
- Jain, G. P., Gurupur, V. P., Schroeder, J. L., & Faulkenberry, E. D. (2014). Artificial Intelligence-Based Student Learning Evaluation: A Concept Map-Based Approach for Analyzing a Student's Understanding of a Topic. IEEE Transactions on Learning Technologies, 7(3), 267-279. https://doi.org/10.1109/tlt.2014.2330297
- Jui-Feng Weng, Shian-Shyong Tseng, & Tsung-Ju Lee. (2010). Teaching Boolean Logic through Game Rule Tuning. IEEE Transactions on Learning Technologies, 3(4), 319-328. https:// doi.org/10.1109/tlt.2010.33
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching?learning in higher education during lockdown period of COVID?19 pandemic. International Journal of Educational Research Open in press. New Education Policy, Government of India, Ministry of Human Resource Development; 2020. Available from: https:// www.mhrd.gov.in/nep-new. [Last accessed on 2021 Jan 05].
- Speck, M. (1996). The change in a school learning community. The School Community Journal, 6(1), 69-79.
- Tubaishat, A. and Lansari, A. (2011). Are Students Ready to Adopt E-Learning? A Preliminary E readiness Study of a University in the Gulf Region. In International Journal of Information and Communication Technology Research, 1(5), (p. 210).
- Vivekananda, M. (2017). Emerging Trends of E-Learning in India. International Journal of Advances in Electronics and Computer Science, ISSN: 2393-2835 Volume-4, Issue-6.
- Vora, M. (2020). E-Learning Systems and MOOCs A Review. International Journal for Research in Applied Science and Engineering Technology, 8(9), 636-641. https:// doi.org/10.22214/ijraset.2020.31532

Vol. XIV, No.2 Dec. 2022

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 21-30

Preference Based Analysis on Online Course Structure of Research Methodology using Conjoint Method

Sanjib Kumar Gupta*

ABSTRACT

Global pandemic Covid- 19 has played a major role in increasing demand of online courses. Blackboards and white screens are gradually shifted to mobile and laptop screens. The e-learning becomes indispensable part in the academic arena. Courses on research methodology are most popular on online platform as research scholars and faculties from different institutions may got involved to their desirable option without facing much trouble of transportation. This paper tries to find out the preference of research fraternity of social science streams while they choose any research methodology course through online. Responses have been gathered using Google form from 1447 researchers of social science streams. Conjoint analysis has been performed to investigate what combination among different levels of attributes a researcher prefers while choosing any research methodology course. Order of attributes has been assigned based on their importance. Logistic regression has been performed to find out the demographic and socio-economic factors that influence the attributes.

Key words: Research methodology, Online, Questionnaire, Conjoint Analysis, Logistic Regression

Introduction

According to the American sociologist Babbie (1983), research involves inductive and deductive methods to perform a systemic enquiry to describe, explain, predict, and control the observed phenomenon. Research work generally starts with some research questions and suitable methodologies to address the research problem. Research methods in various fields may be considered as a tool to achieve certain objectives. In any field study the outcomes largely depend on the research methodology structure. By thoroughly collecting data from the field through different sampling techniques and questionnaire researchers in the field of social sciences obtain valuable insights of different brands or products or market demands. Thereby, the researcher can effectively make conclusions about different business strategies. Thus, research methodology is an important part of education for researchers. The effect of social science studies largely relies on how appropriately the research methods chosen. Sackett and Larson 1990 pointed out that conclusion of an experiment depends on some steps like designing, data analysis, construct validation etc. Scandura and Williams (2000) illustrated the impact of research methodology

^{*} Department of Statistics, Sarsuna College, University of Calcutta, Kolkata, India Email: gsanjib.stat@gmail.com

Preference Based Analysis on Online Course Structure of Research Methodology using Conjoint Method

in management. D?WIGO? (2018) also discussed the scientific research methodology in management studies. The students and faculties of social science streams are often face issues with data dealings which need proper knowledge about effective data use and analysis. For this purpose, it is always better to have some workshops or trainings or development programmes to know the direction of research properly. But there are very few institutes that provide that types of course in offline mode. Indian students have to complete a course work for Ph. D. where a small part of research methodology is included. But these are not sufficient for full understanding. Besides students conduct different field analysis to complete their project work at colleges and universities without having a good knowledge regarding how to collect data, arrange data and analyze those data. Many faculties of social sciences stream are involved in research for their own purpose or guide students for their fulfillment of educational degree. This is why it is required a proper course of research methodology for both students and teachers.

The pandemic Covid-19 has shifted the platform of teaching. Chalk-blackboard usual classes are confined into mobile and computer screens. Students, teachers and almost entire educational fraternity are becoming habituated with e-learning. Ministry of higher education (MHRD) has also introduced different online portals, educational channels. MHRD has also notified that all the career advancement courses for teachers will be conducted online. So, there is no option to continue educational activities without choosing the web-based platform. Thus, the pandemic acted like a catalyst to grow the web platform for educational purpose. Rosenberg and Foshay

(2002) characterized e-learning as the utilization of internet advancements for conveying various arrangements that improve information and execution. Yu et al. (2010) represented web-based learning as sustainable delivery systems. Gupta and Sengupta (2021) discussed about the impact of virtual medium in our education system based on students' perception. Many academic institutions which were earlier reluctant to change their traditional pedagogical approach had no option but to shift entirely to online teaching-learning. In response to significant demand, many institutes are offering online learning platforms/ courses and students, teachers and scholars are also participating in those courses. Levin et al. (2009) explored difference in perception for online versus traditional classes for a global business course. Mann and Henneberry (2014) investigated students' preference while choosing online class and offline class. Horvat et al. (2014) discussed the students' perception on Moodle classroom. Pasha and Gorya (2019) analyzed students' preference and perception towards online education in Hydrabad. They have also compared online education with traditional one. Kuzmanovi? (2019) examined students' preference towards e- learning environment through conjoint analysis. Lambert and Yanson (2017) investigated employee preference in learning modality for professional development. Conrad (2008), Roberts (2010) suggested that the online environment should be such that it will be able to understand the students' requirement. Zhang et al. (2014) discussed how to minimize the disadvantages of e-learning.

Among different courses the demand of research methodology courses is very high. Since most of the educational institutes are closed or irregular at the time of Covid-era; many teachers, researchers and student utilized this time to acquire knowledge of research methodology so that they can use it efficiently afterwards. Online research methodology course has several merits

- It is easily accessible.
- * Most of the researchers including faculty and students of higher education have smart mobile phone and legitimate internet connection and hence they can join any online courses.
- * It is flexible. One can choose course according to his/her convenient time.
- One can get knowledge from different field and experts around the word.
- * Participants can join from their own desk.
- Online classes can be recorded and hence one can see it several times to understand any topic.
- * Hands on trainings for research methodology are also possible.
- * A large number of online research methodology tools are available. Trainer can use a combination of text, audio, and video to present different research tools/ techniques in a better way.

Researchers' preferences in choosing online courses vary based on different influencing factors. There are limited studies on students' preferences of such choices. To fill this gap this paper has two basic objectives:

- To find out the combination of different (i) level of attributes under study that researchers prefer while joining an online research methodology course. For this purpose, a conjoin analysis have been applied.
- To find out the demographic and socio-(ii) economic factors that affect the utilities

Vol. XIV, No.2 Dec. 2022

attributes related to the preference for research methodology. For this purpose, logistic regression is performed.

Conjoint attributes and attribute levels

The conjoint analysis plays an important role to design and thereby launch a new product in the market (Green and Krieger, 1997). Conjoint analysis is a multivariate technique that applied in survey-based study. It determines the attributes of a service or product. The main purpose of a conjoint analysis is to identify the salient combinations of features that are demanding while launching a service or product. It also orders the attributes according to importance. Conjoint analysis has been effectively applied in the market of education for a long time to understand students' perception and preference for different attributes of education (Souter and Turner, 2002; Gökhan and Buke, 2012; Won and Bravo, 2009; Carey et al., 2018; Sun and Wang, 2014; Kuzmanovi? et al., 2019 etc.)

The basic model for conjoint analysis can be expressed as (Carroll and Green 1995)

$$U(x) = \sum_{i=1}^{k} \sum_{j=1}^{l_i} \beta_{ij} x_{ij}$$
 1

Where,

U(x) = Overall utility of an attribute $\beta ij =$ utility of the jth level of the ith attribute, i=1,2,...,k; j=1,2,...,l

 $x_{ij} = \begin{cases} 1, \text{ if the jth level of ith attribute is present} \\ 0, \text{ if the jth level of ith attribute is absent} \end{cases}$

The ordinary least square method is applied to estimate the regression parameter

Preference Based Analysis on Online Course Structure of Research Methodology using Conjoint Method

ij (Fox, 1997). Here the preference ratings and dummy variables representing the levels of the attributes are dependent and independent variables respectively. The following Table 1 illustrates the details of the attributes and the attribute levels used in this paper.

Attributes		Factors
Research methodology	(i)	Particular research/subject based
topic (RMT)	(ii)	General Topic
Device (D)	(i)	Computer
	(ii)	Mobile Phone
Online Platform (OP)	(i)	YouTube Live
	(ii)	Zoom, GoogleMeet, TeamLink etc
Communication (C)	(i)	WhatsApp
	(ii)	Telegram
Time Slot (TS)	(i) Morning	
	(ii)	Afternoon
	(iii)	Evening
Duration (Days)	(i)	1-15
(DU)	(ii)	1530
	(iii)	>30
Course fees (Rs.)	(i)	Less than2000
(CF)	(ii)	2000-5000
	(iii)	More than 5000

Table01: Attributes and corresponding levels under study

Methods and data collection

The conceptual framework of the conjoint analysis is given below



Fig 1: Conceptual framework for conjoint analysis

At first, different combinations of the levels of the attributes have been prepared. From the table 1 it can be said that if the all possible combinations of the levels are considered then there will be 432 possible combinations. The number of combinations is quite large. Instead of 432 possible combinations 32 orthogonal combinations have been generated including of 5 hold out cases using SPSS. Thus, two sets of data were obtained. They were

- (i) Estimation set: This set consists of 27 combinations. These combinations were used for evaluating part-worth functions for the attribute levels.
- (ii) Holdout set: This set consists of 5 combinations. These combinations were to assess reliability and validity.

The orthogonal arrays were generated using SPSS software.

On the basis of these 32 cards or combinations the first part of the questionnaire has been prepared. Metric conjoint analysis is used for survey data in this part. Students, Vol. XIV, No.2 Dec. 2022

teachers and research scholars of social science studies were asked to rank the cards. Google form was used to collect the response. A total of 1447 researchers of social science background including students and teachers responded on it.

The second part of the questionnaire consists of demographic and socio-economic and demographic profiles of the respondents. Table 2 represents the distribution of respondents corresponding to the selected profiles. Logistic regressions have been performed to test the impact of these profiles on the attributes' preference level.

Demographic Pi	Demographic Profile			
Age (year)	18-25	1	30	
	25-40	2	37	
	40-65	3	33	
Gender	Male	1	58	
	Female	0	42	
Area/Locality	Rural	0	32	
	Urban	1	68	
Marital Status	Married	1	43	
	Unmarried	0	57	
Income per	0-35000	1	39	
month (Rs)	35000-75000	2	24	
	>75000	3	37	
Profession	Student and Research Scholar	0	57	
	Teacher	1	43	

Table 2: Socio, economic and demographic profile of respondents

Results and Discussions

Average utilities of each attribute levels

are determined using SPSS software. The result is depicted in Table 3.

Preference Based Analysis on Online Course Structure of Research Methodology using Conjoint Method

Attribute	Level	Utility Estimate	Std. Error
RMT	Particular research/subject based	1.770	0.660
	General	-1.770	0.660
OP	Zoom, Google meet etc	0.670	0.820
	YouTube	-0.670	0.820
С	WhatsApp	-0.176	0.640
	Telegram	0.176	0.640
D	Computer	-0.144	0.640
	Mobile	0.144	0.640
TS	Morning	-0.104	0.932
	Afternoon	-0.175	0.855
	Evening	0.279	0.672
DU	<15	0.514	0.659
	15-30	0.922	0.583
	>30	-1.436	2.284
CF	<2000	0.742	0.660
	2000-5000	-0.329	0.742
	>5000	-0.413	0.836
	(Constant)	10.622	2.284

 Table 3: Average Utility score for each level of the attributes

Table 3 shows that particular research/ subject based methodology yields a greater utility than general research methodologies. This implies that scholars of different Social studies prefer the research methodology courses more that related to their own research/subject. Zoom, Google Meet etc online platforms are more in demand than YouTube because of easy interaction options. Even one can interact face to face through a mobile/computer screen in these video platforms. Telegram has higher utility than WhatsApp as an information sending medium which may attribute to the easy and smooth transfer of large files.

The present study has found that mobile phone holds a relatively higher importance than computer as communicating device. Mobile phones are easy to access and carry anywhere. Researchers prefer the evening slot most than morning and afternoon as for example teachers of colleges and universities have their classes during morning and afternoon. A research methodology course with 15-30 days has more utility than less than 15 days and long duration courses. Less than 2000 course fee has been given more importance than higher fees. This implies that researchers don't want to invest much course fee for the courses. The most preferable combination of choices for a research methodology course is

* Particular/ subject based course + Zoom, Google Meet etc video platform + Telegram as communication medium + Mobile phone as device + Evening time slot + 15-30 days course + Course fee less than 2000

For this combination the utility value is 15.325.

Table 4 highlights a measure of the average relative importance of the attribute.

Attributes	Importance Value		
Research Methodology Topic (RMT)	13.921		
Online Platform (OP)	8.458		
Communication (C)	8.803		
Device (D)	11.173		
Time Slot (TS)	14.236		
Duration (DU)	19.322		
Course Fee (CF)	21.350		

Table 4: Average importance value of the attributes

The table 4 shows that course fee is the most influential attribute. Course duration and time slot are the second and third preferable attributes. The result also shows that communication medium and online platform are the least considered by the researchers. In Table 5 three statistics are computed based on the correlation between observed and estimated preferences. The p-values corresponding to test statistics show that the correlations are high for all conjoint models which validate a good and efficient model fit.

Table 5: Correlation between observed and estimated preferences

	Value	Significance
Pearson's R	0.894	0.01
Kendal's tau	0.785	0.02
Kendal's tau for holdouts	0.683	0.04

Logistic regression analyses have been performed to study the relationship between the preferences under study with some demographic and socio-economic profiles of the respondents. Here the preferences are the dependent variable and demographic and socio- economic profiles are the independent variable. Since seven attributes have been studied here, seven regression models are considered. For each attributes 1 is assigned for the level which has maximum utility and 0 for the other levels. The results of the logistic regressions are given in Table 6. Preference Based Analysis on Online Course Structure of Research Methodology using Conjoint Method

Dependent variable	Constant	Age	Gender	Locality	Marital Status	Monthly Income	Profession
Methodology	0.97	10.54	7.82	8.25	9.31	10.92	4.39
Туре	(0.18)	(0.04*)	(0.07)	(0.31)	(0.42)	(0.47)	(0.22)
Online Platform	0.90	7.04	9.06	-14.79	-6.26	-4.25	-6.22
	(0.22)	(0.11)	(0.11)	(0.04*)	(0.65)	(0.68)	(0.37)
Communication	2.06	-19.26	6.09	-11.24	8.31	-9.93	-11.53
	(0.11)	(0.05*)	(0.21)	(0.09)	(0.35)	(0.10)	(0.05*)
Device	3.28	15.77	-12.47	7.62	-4.13	6.33	12.32
	(0.09)	(0.03*)	(0.04*)	(0.09)	(0.42)	(0.47)	(0.05*)
Time Slot	2.22	-11.35	17.99	-11.22	-5.82	5.30	9.71
	(0.15)	(0.04*)	(0.01*)	(0.05*)	(0.63)	(0.42)	(0.04*)
Duration	1.07	-10.21	-11.92	12.44	-5.92	7.14	11.21
	(0.20)	(0.05*)	(0.05*)	(0.71)	(0.55)	(0.29)	(0.04*)
Course Fees	1.76	-12.09	7.61	4.98	-6.03	-12.33	-15.05
	(0.23)	(0.04*)	(0.47)	(0.52)	(0.54)	(0.05*)	(0.04*)

 Table 6: Logistic Regression Model Results for Attribute Levels

From table 6 we have the following results:

- * Research Methodology Type depends on age only
- * Online platform depends on locality only
- * Communication depends on age and profession.
- * Device depends on age, gender and profession
- * Time slot depends on age, gender, locality and professions
- * Duration of course depends on age, gender and profession
- * Course fee depends on age, monthly income and profession

Conclusion

The study of the present paper mainly focuses on the relative importance of the

attributes while researchers select research methodological courses. For this purpose, a conjoint analysis has been performed. Different mutually exclusive levels of the attributes are considered. The best preferable combinations of the levels that researchers value most have been identified from this paper. Among the all possible combinations of the levels 32 orthogonal combinations have been selected. The idle combination is based on subject specific research methodology course with low fee structure, 15-30 day duration, evening time slot, mobile device, telegram message app, and zoom, Google meet etc online platform. The course fee has been assigned as the most important attribute and online platform assigned as the least important from the survey responses. Validity of the conjoint model has been checked. Logistic regression identified the socio economic and

demographic factors that influence the preference attributes. This result indicates that there is a possibility that the utilities may sensitive to the profile of these variables. This study would help the institutions to develop a research methodology course based on preferences of research scholars. The analysis is also giving insight for changing a course structure to make it more learners friendly.

Reference

- Babbie, E. (1983). The Practice of Social Research. 3rd edn. Belmont, CA: Wadsworth Publishing Company
- Carey, J. M., Carman, K. R., Clayton, K. P., Horiuchi, Y., Htun, M., Ortiz, B. (2018). Who wants to hire a more diverse faculty? A conjoint analysis of faculty and student preferences for gender and racial/ethnic diversity. Politics, Groups, and Identities, 1-19.
- Carroll, J. D. and Green, P. E. (1995). Psychometric Methods in Marketing Research: Part I, Conjoint Analysis. Journal of Marketing Research, 32, 385-391
- Conrad, D. (2008). Situating Prior learning assessment and recognition (Plar) in an online learning environment. The theory and practice of online learning, 75.
- D?WIGO?, E (2018). Scientific research methodology in management sciences. Seria: ORGANIZACJA I ZARZ?DZANIE z, 118, 117-134.
- Fox, J. (1997). Applied Regression Analysis, Linear Models, and Related Methods. Thousand Oaks, CA: Sage
- Gökhan, D., Buket, A. (2012). An Examination through Conjoint Analysis of the Preferences of Students Concerning Online Learning Environments According to Their Learning Styles. International Education Studies, 5(4),122-138. Doi: 10.5539/ies.v5n4p122
- Green, P. E. and Krieger, A. M. (1997). Using Conjoint Analysis to View Competitive Interaction through the Customer's Eyes, in Day, G. S.; Reibstein, D. J.; and Gunther, R. E. (eds), Wharton Dynamic Competitive Strategy, pp. 343-66. New York, NY: John Wiley & Sons.
- Gupta, S.K., Sengupta, N. Webinar as the future educational tool in higher education of India: A survey-based study. Tech Know Learn (2021). https://doi.org/s10758-021-09493-7.
- Horvat, A., Dobrota, M., Krsmanovic, M., Cudanov, M. (2015). Student perception of Moodle learning management system: a satisfaction and significance analysis. Interactive Learning Environments, 23(4), 515-527. Doi: 10.1080/10494820.2013.788033
- Kuzmanovi?, M., Andjelkovi? Labrovi?, J, Nikodijevi?, A. (2019). Designing e-learning environment based on student preferences: conjoint analysis approach, International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), 7(3), 37-47. doi: 10.5937/IJCRSEE1903037K
- Lambert, A.D., Yanson, R. (2017). E-Learning for Professional Development: Preferences in Learning Method and Regency Effect. Journal of Applied Business and Economics, 19(3), 51-63.

Preference Based Analysis on Online Course Structure of Research Methodology using Conjoint Method

- Levin, M., Guy, P., Straus, P., Levine, H.T. (2009). Exploring Differences In Preference For On-Line Versus Traditional Classroom Delivery Of A Freshmen Introduction To Global Business Course. American Journal of Business Education, 2(6), 69-76. DOI:10.19030/ ajbe.v2i6.4089
- Mann, J.T., Henneberry, S.R. (2014). Online versus Face-to-Face: Students' Preferences for College Course Attributes. Journal of Agricultural and Applied Economics, 46(1), 1-19. Doi: https://doi.org/10.1017/S1074070800000602.
- Pasha, A., Gorya, J. (2019). Student Preference and Perception towards Online Education in Hyderabad City. International Journal of Trend in Scientific Research and Development (IJTSRD), 3(3), 656-659. DOI:10.31142/ijtsrd22876
- Roberts, R. M. (2010). The digital generation and web 2.0: E-learning concern or media myth?. In Handbook of Research on Practices and Outcomes in E-Learning: Issues and Trends, 93-115.
- Rosenberg, M. J., Foshay, R. (2002). E-learning: Strategies for delivering knowledge in the digital age. Performance Improvement, 41(5), 50-51. DOI:10.1016/S1096-7516(02)00082-9
- Sackett, P. R., Larson, J. R., Jr. (1990). Research strategies and tactics in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology, 419-489.
- Scandura, T. A., Williams, E.A. (2000). Research methodology in management: current practices, trends, and implications for future research. Academy of Management Journal . 43 (6). 1248-1264. DOI:10.2307/1556348
- Sun, J., & Wang, Y. (2014). Tool choice for e-learning: Task-technology fit through media synchronicity. Information Systems Education Journal, 12(4), 17.
- Soutar, G. N., Turner, J. P. (2002). Students' preferences for university: A conjoint analysis. International journal of educational management, 16(1), 40-45. https://doi.org/10.1108/ 09513540210415523.
- Won, D., Bravo, G. A. (2009). Course design in sport management education: Addressing students' perspectives through conjoint methodology. Journal of Hospitality, Leisure, Sports and Tourism Education (Pre-2012), 8(2), 83-96. DOI:10.3794/johlste.82.221
- Yu, C., Yu, W. C. W., & Lin, C. F. (2010). ComputerMediated Learning: What Have We Experienced and Where Do We Go Next?. In Handbook of research on practices and outcomes in e-learning: Issues and Trends, 1-18, IGI Global.
- Zhang, D., Zhao, J. L., Zhou, L., Nunamaker Jr, J. F. (2004). Can e-learning replace classroom learning? Communications of the ACM, 47(5), 75-79.

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 31-41

Inclusion of the Tribals for Educational, Social and Economic Equity through an Innovative Multilingual Approach

Shilpa Raghuvanshi Chauhan*

ABSTRACT

India is a land of 1635 native languages of which about 197 are classified as endangered and vulnerable by UNESCO. As most of the tribal languages don't have a script, innovative but practically feasible methods of introducing the usage of mother tongue/native tribal languages in education programs in India are urgently needed. Instructions in mother tongue in the education system will prevention of extinction of tribal languages and better learning in tribal students with fewer dropouts. This paper highlights a unique model of mainstreaming tribal students by a multilingual approach that diverts the feared extinction of tribal language on one side and merges deprived tribal students with the rest of the world for educational, social, and economic equity. **Key words:** Mother tongue, Tribal language, Education, Innovative methods, Learning

Introduction

Literacy rate among the backward groups is a powerful indicator of social and economic development of any country. Literacy rate of Schedule Tribes (ST) in India is far below national literacy average (74.04%) nearing about approximately 60%. Although post-Independence, various concrete steps for economic and educational development of tribal were taken but their inclusion in education is feeble as little attention was paid to link education to their native culture. The denial of schooling in the mother tongue to children of tribal communities and the fact that they live mostly in remote regions of India are some of the major reasons for this stark difference in the literacy rate. Although the Constitution in 1956 recognised the need for primary education in the mother tongue for linguistic minorities, education till date is being imparted primarily in the 15 'official' languages and English. The denial of schooling in the mother tongue to tribal children has obscured them from using prior knowledge as student's experiences and identity are housed in their mother tongue only.

Many studies have demonstrated that use of students' mother tongue in education has greater impacts not only on individual students but on the society as a whole, as it: (1) increases access and equity, (2) improves learning outcomes, (3) reduces repetition and

* Salwan Public School, Rajendra Nagar, New Delhi. Email: shilpa.raghuvanshi@yahoo.co.in
Inclusion of the Tribals for Educational, Social and Economic Equity through an Innovative Multilingual Approach

dropout rates (4) fosters positive social cultural benefits and (5) lowers overall costs (Bender, 2005). Hence, the Indian education system desperately needs a reform that rejuvenates the dying tribal languages and bolsters the literacy rate of tribal children who otherwise cannot access education due to language differences. In such a scenario, the programmes that aim to teach children what is important in their community; teach them culture and values that are hidden in their languages and give them with a sense of stability, self-esteem, and cultural identity to enhance learning is needed.

On the other hand, teaching tribal students exclusively in a language that cannot be used to communicate with the world outside will keep them away from the latest technology and development in the outside world. All their innovations and knowledge will be of no use if it is not conveyed to the rest of the world. Hence, this will stagnate all the hard work to a restricted niche of tribal world only, failing to provide growth, power, position, etc. This will lead to meaningless education and frustration as tribal children cannot be at par with the world though being literate. But what is the meaning of 'education' and its purpose?

Hence, there is urgent need of designing a model that can address both the problems coherently; averting the fear of extinction of tribal language on one hand and raising tribal students to a level where they can easily communicate with the world outside, so that they are transformed from marginalised to empowered status. Also, the model needs to imbibe all those routes that are flexible enough to contain maximum individuals into the educational programme as lifting the whole society will lead to their holistic empowerment.

The objective of this paper is to discuss

- 1. Innovative ways of resurrecting Indian tribal languages.
- 2. To design a practical and feasible model of inclusion of tribal in education.
- 3. To teach any one standard language to the tribals.
- 4. To contain maximum individuals in the educational programme.

Resurrecting Tribal Languages &Teaching Standard Languages: A Challenge

Developing Dual Language Identity is a challenging task. The long-term effects of colonization have ridden many Indian communities of their native tongue and unfortunately socioeconomic circumstances have led to compulsory education in a link language like "English".

Reasons why English could easily throttle our rich heritage of language are:

- 1. During British rule, English became an official language so much so that all the official documentation were done in either the national language or English.
- 2. Dealing with official matter made learning English a necessity and other who were not versed in this language were dependent on English speaking/ understanding individuals.
- 3. Higher education books were printed in English and were not accessible in tribal language.

- 4. A general consensus developed amongst Indians that an individual better versed in English language is more educated and advanced as compared to non-English speaking individuals. This feeling of inferiority amongst native language speaking individuals further forced them to learn this foreign language abandoning the learning in mother tongue.
- 5. A unified language connection of expression in a country where language changes after every 15 kms.

All this leads to negligence of mother tongue, so much so that many of them are at the verge of extinction. Therefore, English or Hindi? became more of a necessity in a multilingual country than a culture hailing from British rule. In such a scenario, resurrecting so many tribal languages is a big problem challenge and urgently needs various innovative methods for their resurrection (Fig.1).

On the other hand, due to globalization connecting language is a mandate for mainstreaming of tribal. They have no basic knowledge of newly taught standard language, even after grooming of several years students cannot communicate or construct small sentences properly. Limited time does not permit teachers to teach basic aspects of language learning skills like listening, speaking, reading, writing and communicating. As the second language is not spoken outside the school, prolonged and specific practice in the elements of that language is not acquired and hence fluency in the standard language is not gained or acquired. Wrong pronunciation and intonation are rarely rectified due to time crunch or lack of expert human resources. School teachers, being unaware of proper phonetic study of the words, may fail to correct the pronunciations of their students at the initial stage.

Learning of a second language means the forming of fresh speech habits (the voice rises and falls in the manner peculiar to vernacular speech), which is not easy. Greater persistence of effort is therefore needed on the part of both the teacher and students. Since preaching second language starts late the use of the mother tongue becomes spontaneous. Fear of learning second language among students as a very difficult language is one of the greatest hindrances in their way of acquiring it. The teachers are failing in convincing students about the simplicity of standard language and its utility in their future lives. Inclusion of the Tribals for Educational, Social and Economic Equity through an Innovative Multilingual Approach

Figure 1 : Percentage differences in scheduled languages in span from 1971-1981 to 2001-2011, Source: Census of India 2011



Note: Efforts by Indian government to develop and sustain dual language culture in tribal schools

Tribal students and their parents in India feel alienated from the rest of the society as their mother tongue is neither used in education nor during communication in schools. In such a scenario schools have cautiously designed multilingual programmes where they either teach more than one language or teach through more than one language that is deemed to be pedagogically appropriate and socio-politically acceptable (Fig.2). Research based on intense research has shown that there exists a significant positive correlation between bi/ multilingualism, cognitive flexibility and scholastic achievement (Cummins, 1986 & Peal, 1962). In India, the MLE programme was formally introduced in Andhra Pradesh in 2004 and in Odisha in 2006 following a brief phase of development of curriculum and MLE learning materials including textbooks were designed by a collective of language experts, educationists, department of Tribal Welfare, NGO representatives working in tribal areas, subject experts and local members of the tribal community (Mohanty, 2009). It is now being up-scaled to nearly 2500 more schools across eight districts in eight tribal languages in Andhra Pradesh and 544 additional schools across eight districts in ten tribal languages in Odisha.

Journal of Education & Pedagogy

In the MLE schools across the two states, the mother tongue of the tribal children is used as the medium of instruction (MoI) in grade I and then based on a transition plan a gradual shift is made to the dominant state language (Odia in Odisha and Telugu in Andhra Pradesh) over the next four years. By the time the student reaches grade V, there is a hundred percent shift to the dominant state language as the MoI, although the Mother Tongue (MT) may continue as a language subject. Though teaching exclusively in mother tongue could have helped students score better in certain tests which is considered very relevant in Indian education system, the connection to the technical and globalized world outside that school is almost made impossible if the child is not acquainted with any standard language. Multilingual education system thus is very crucial to give a common bench to all the students to compete and move ahead in life without getting restricted due to language differences.

Figure 2: Zip lock model for inclusion of tribal and their languages in education



Note: Advantages of bilingual education

The National Curriculum Framework (NCF), 2005 emphasises the importance of imparting primary education in the mother tongue of the child. Use of local language as instruction medium will make education more relevant to learners as it also leads to inclusion of local content in the curriculum, better teachers-learners interaction that greatly improves the effectiveness of the learning process, greater participation of parents and community members as classroom resources because most of the small linguistic groups live in remote areas underserved by adequate infrastructure and human resources (Bender, 2005). These programmes require careful crafting in order to ensure that young children are not over-burdened (Fig.3).

Inclusion of the Tribals for Educational, Social and Economic Equity through an Innovative Multilingual Approach

Exclusive Features of Zip Lock Model Are

- 1. Maximizing retention of tribal students in school by moderating the curriculum as per their convenience so that there is maximum participation and most important zero drop rate.
- 2. Another unique feature of this model is that fast learning students can be given attractive packages in terms of jobs or scholarship that will inspire all other

Figure 3: Exclusive features of zip lock model

students to work harder.

3. Another distinguishing feature of this model is that fast learners themselves will be recruited by the school on a part-time basis to go door to door in their village and convince orthodox parents to send their children to school and encourage them to learn any of the standard languages, because till the environment at home is not conducive to learning, the child may drop out.



Note: Features of zip lock model that would help promoting education in tribals

The Advantages Of The Zip Lock Model

- 1. It will turn the tide of extinction of many tribal languages, as tribals from these regions will get mainstreamed with others in the society and will start speaking their languages in established centres and may even pen down their scripts in their mother tongue. Even the process of cultivating oral languages will be highly beneficial.
- 2. It will foster opportunities to tribals and help marginalised communities address longstanding discrimination.

3. It will connect the alienated tribals to other sections of the society and help them attain economic and social equity.

Map Of Zip Lock Model

An appropriate model is needed for the proper functioning of Zip Lock Model (Fig.4 &5)

Inclusion: Zonal officers along with a team of appointed teachers will go door to door in each tribal area to convince them to send their children to schools. Parents and elders of the society should also accompany students during first semester to learn what the students are learning. They can give valuable feedback to the teachers of how the newly taught content could be related to their cultural heritage and made easier for the students to grasp the concept.

Retention: To retain the students in schools initial burdening of students with a multilingual curriculum should be avoided. Students who were earning anyhow before their admission into the school should be awarded scholarships and should be trained in one of the skills that can help them pursue their part time job as a profession later. Healthy meals, educational cinemas conferring that how tribal like them can reach the pinnacle of success should be shown to inspire them; constant reinforcement that a language can bridge the gap between them and other sections of the society should be done. Trips to nearby industries and cities where tribals from their society have succeeded should be planned. All in all they have to be taught that multilingual education had helped many amongst them to break the virtual barricade of language and can fetch them what they dream of.

Transformation: Transformation step is the most flexible arm of this model, where the students are taught at a pace that suits their learning capabilities as the environment at their home might not conducive to get fluent in a second language or they may not get any learning support at home. In such a scenario their confidence should not be lost and the standard language should be taught as per their capabilities. Syllabus should be customised as per the learning capabilities of students.

Figure 4: Flowchart of the steps of zip lock model



Note: Steps of zip lock model for inclusion of maximum children under educational program

Inclusion of the Tribals for Educational, Social and Economic Equity through an Innovative Multilingual Approach



Figure 5: Diagrammatic representation of working of zip lock model

Note: Diagrammatic representation of working of zip lock model

Practices to Ground Zip Lock Model through Multilingual Approach in Indian Schools

Extensive research has been done in western countries to bolster multilingual education system (Rhodes, 1990 & Short, 1991). Rural setting of tribals, lack of funding, lack of expert human resources, ignorance towards education and restriction to learn another language make multilingual approaches a tedious task in Indian schools. Small but practically feasible approaches must be designed to address the ground difficulties rather than just copying a scheme from any western country. Another important issue is that- Learning more than one language could be very tedious for students; the content should be cautiously drafted to ensure that students enjoy learning more than one language and firmly understand the purpose behind multilingual education. Use of the mother tongue in the official context of school raises its prestige and practicality in the eyes of both speakers and non-speakers, which has the capacity to improve the students' selfconfidence, social relations and political participation as well as education. Also, they should be continuously reinforced that gradual transition from their mother tongue to a standard or link language will be instrumental in mainstreaming them, which could be critical for their economic and social prosperity. Also, being well versed in mother tongue (tribal language) will keep their culture alive and their people connected to the world via them.

Culturally relevant content to bridge mother tongue with standard language:

In India, people take pride in speaking their language, perusing their culture, following

their customs and tradition. Tribals and their society consider any change in their practices as a threat to their tradition. In such a scenario, the education system has to maintain a fine balance between cultural preservation and innovation and upgradation to multilingual approaches in education.

Educational materials prepared should have equal indulgence in both languages, so that tribal languages re-gain their lost importance and tribal students get access to standard languages via their mother tongue. Some of the materials that can be prepared for the purpose include subject textbooks in tribal language, big and small books based on certain cultural themes, story books, glossaries, tribal language phrase books, teacher handbooks and picture dictionaries.

Such literature will endorse a sense of pride regarding their own language among the tribal. Since the school books are designed so that there exists a balance of curriculum between mother tongue and standard language. This effort will help them understand that the standard language being taught to their children in schools is not to replace their mother tongue, but to go hand in hand with their native language. Since higher education and their relevant reading material is available in established standard languages only, learning it become a sort of compulsion to get access to higher education. They should be told tht the real impact of this positive feeling on further learning is limitless.

Culture cum current classroom arrangement

Minimal resources, rural settings and lack of technology in tribal sectors of India restrict the usage of latest technology to endorse multilingual education in Indian schools. In such a scenario, improving the available resources skilfully is the only option to merge the culturally and globally relevant content.

The classroom walls of the schools should be used to endorse multilingual curriculum supporting usage of tribal language. Teachers and students should accessorize their classroom with all the basic and necessary information pertaining to the learning of tribal languages. Colourful portrayals of the local tribal people and their culture will help to connect the learning experience with the localities. Walls of the rooms and corridors should be so designed that they depict themes of both the languages and a relation should be drawn between the mother tongue and the standard language. The following points should be taken care of while designing the walls:

- 1. The four walls of classroom should clearly show a transient gradation from mother tongue to the standard language in a term wise pattern.
- 2. The transition should be in the entire regime of relevant subjects like science, social science etc.
- 3. The walls should be designed in a child friendly manner and should make the acquaintance to both languages easier.
- 4. Overcrowding of the walls should be avoided and designing should be done with comprehensible schematic diagrams/texts for the children, which will create a friendly environment for the children.

Multilingual dictionaries

1635 native languages are spoken in India. Lack of enough resource persons that can translate these languages amongst each other is going to be an obvious bottleneck. To relieve this situation, a handy dictionary should be accessible to all the school going students so that they can learn even when away from home. It can be produced in collaboration with fluent speakers, with support from institutes that teach endangered languages. Dictionaries of this type will help in better endorsement of the language that can be discussed at home not only among the students but also among the non-school going individuals which should include parents and relatives of the students also.

Integration Of Fusion Culture

Students should be encouraged to design street signs, public maps, short films; small articles that can be publish on websites, and create music based on fusion of languages they are learning that can be sent to a panel of experts and students are rewarded for the same. It can be based on various heritage languages as well as standard languages. Lively practices like this will bring dormant languages back to life and fluency in standard languages will be attained faster. Students should be rewarded for any such constructive initiative to boost the confidence of other batch mates.

Integration of Local Stakeholders

Every language has its own demands. Non-native professional teachers may not induce robust immersive environment where transition from mother tongue to standard language is smoothly attained in the restricted timing of the school. Parents of tribals should be requested to attend the school twice a week (flexible schedule) along with their wards free of cost so that they also get acquainted to the standard language, so that they can reinforce it at home. This practice will also benefit their own professional development. Journal of Education & Pedagogy

Means of Communication

Many tribal students cannot have access to the school and hence cannot be mainstreamed. Indigenous radio stations that are thriving around almost all parts of the country can transmit multilingual educational capsules to low cost and easily available radios. Even, television can help multilingual education in all the relevant subjects by having a daily presence in the lives of speakers near and far. Indigenous language broadcasters, artists, writers, commentators, and journalists can play the most critical role by creating content in indigenous languages for radio, TV, and other mass media.

Conclusions

Equity in education can fetch both economic and social equality in our country. Both preservation of cultural heritage and getting ready for the ever evolving world outside is the moral responsibility of the education system of our country. Innovative approaches like the zip lock model will help in attaining self-confidence and giving prestige to tribal languages and will facilitate acquaintance to one of the standard languages of India in minimum budget, as it deeply looks into mentality, affordability and practical aspects of the teaching of Indian languages and education of tribal children.

References

Bender, P., N. Dutcher, N., Klaus, D., Shore, J., & Tesar, C. (2005). In Their Own Language-Education for All. Education Notes, World Bank.

Cummins and Swain. (1986) Bilingualism in education : aspects of theory, research and practice. https://lib.ugent.be/catalog/rug01:00012274.

Mohanty, A., Mishra, M K., Reddy, N.(2009). Overcoming the language barrier for tribal children: Multilingual education in Andhra Pradesh and Orissa, India.

Peal, E., & Lambert, W. E. (1962). The relation of bilingualism to intelligence. Psychological Monographs: General and Applied, 76(27), 1-23.

- Rhodes, N., and D. Short. (1990). Strategies and Techniques for Integrating Language and Content Instruction. Washington, D.C.: Center for Applied Linguistics.
- Short, D. (1991). Integrating Language and Content Instruction: Strategies and Techniques. Washington, D.C.: National Clearinghouse for Bilingual Education.

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 42-56

India National Education Policy (NEP) 2020

Gedam Kamalakar*

ABSTRACT

Indian Education has been a topic of debate and discussion for many years now. Plagued by complacency and irrelevance, the Indian Education System has systematically failed many of its students. In 2015, India's Gross Enrollment Ratio (GER) is 19%. It means that out of the 100 students who will finish high school education, only 19 will apply for higher education. India's GER is 6% below the world average and around 50% below the GER of first world countries like the USA and Australia. The Indian government plans to increase this rate by at least 30% by 2020.

India also suffers from a chronic lack of educators. There are more than five lakh vacant posts in elementary schools. 14% of government secondary schools do not even have a prescribed number of six teachers. The expenditure of the Indian government on education is a mere 3.8% of its entire GDP. It is not at all sufficient for the 315 million students in the country, the worlds largest student population. For comparison, it is nearly equal to the entire population of the USA, world's third largest country by population.

The quality of higher education that we receive in the country is also way behind international standards. There are only a few institutes that offer good quality higher education. As a result, only a few students get into those institutes. Other students do not enrol for higher education or settle for new institutes that have mushroomed in different cities. Students who go abroad for higher education, more often than not, do not come back, creating the problem of brain drain. This is a phenomenon where bright minds leave the country and thus do not contribute to the country's development. Students also report that after attending a full days school, they don't have any time or energy to focus on other interests like art, sports or co-curricular activities. Our education system does not focus on building students personalities, rather it focuses on rote learning. The one lecture of arts or sports that students have in the school is not enough to nurture their interest or cultivate their talent. To address these concerns National Education Policy. To bring about these new changes, the Ministry of Human Resource Development conducted surveys and discussions at various online, offline and grassroots levels.

The National Education Policy (NEP) recognizes there is a serious learning crisis and

Researcher, Dept. Of Political Science, Osmania University, Hyderabad (Telangana) India Email: kamalakarou@gmail.com

India National Education Policy (NEP) 2020

emphasizes the need to concentrate on building a foundation for reading and arithmetics from Class I onwards. While the draft strategy recommends augmentation of the Right to Education act to all schools (from preschool to standard 12 rather than Class 1-8), it redraws the schooling framework on a 5+3+3+4 equation rather than the current 10+2model- students in the age bracket of 3-8 years will be a part of the foundation stage, 8-11 age bracket for preparatory schooling, 11-14 years for middle school and 14-18 for secondary school.

The draft also suggests that the complex nomenclature for universities like "unitary university", " deemed university", "affiliated university", etc. be changed to "public", "private", and " private aided" in a phased manner. The draft also seeks to increase the Gross Enrollment Rate (GER) to 50%, which is below 30% now. It also seeks to increase government expenditure on education, though it does not specify by how much. It also talks about establishing a dedicated research fund. A major structural change in the system with the introduction of Early Childhood Care and Education (ECCE) is proposed. The NEP focuses on educating students in a socio-emotional manner. This will ensure that students' personality also develops while they learn and grow.

Higher Education Reforms

Type 1: This type of universities focus on world-class research and high-quality teaching. Type 2: Focus on high-quality teaching across disciplines with significant contribution to research.

Type 3: High-quality teaching focused on undergraduate education.

This type will be driven by two Missions -Mission Nalanda & Mission Takshashila.

Undergraduate programs of 3 or 4 years such as B.Com, B.Voc, BA, BSc will also be restructured with multiple entries and exit options.

A new body, Rashtriya Shiksha Ayog will be established to enable smooth implementation of all programmes and initiatives and to enable coordination between the centre and states.

The National Research Foundation will be found to create a strong research culture.

This draft of the NEP is very forward-looking and it seems able to bring about a drastic change in our educational system. It aims at developing students' personalities and helping them cultivate their talents and interests. The present paper focuses on the National Education Policy is successfully implemented, it will be a huge step into developing our education system and by extension, our economy.

Key words: GDP; NPE; UGC; MHRD; GER; ECCE

Introduction

Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. Providing universal access to quality education is the key to India's continued ascent, and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation. Universal high-quality education is the best way forward for developing and maximizing our country's rich talents and resources for the good of the individual, the society, the country, and the world. India will have the highest population of young people in the world over the next decade, and our ability to provide high-quality educational opportunities to them will determine the future of our country.

Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. Providing universal access to quality education is the key to India's continued ascent, and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation. Universal high-quality education is the best way forward for developing and maximizing our country's rich talents and resources for the good of the individual, the society, the country, and the world. India will have the highest population of young people in the world over the next decade, and our ability to provide high-quality educational opportunities to them will determine the future of our country. The global education development agenda reflected in the Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015 - seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030. Such a lofty goal will require the entire education system to be reconfigured to support and foster learning, so that all of the critical targets and goals (SDGs) of the 2030 Agenda for Sustainable Development can be achieved. The world is undergoing rapid changes in the knowledge landscape.

With various dramatic scientific technological advances, such as the rise of big

data, machine learning, and artificial intelligence, many unskilled jobs worldwide may be taken over by machines, while the need for a skilled workforce, particularly involving mathematics, computer science, and data science, in conjunction with multidisciplinary abilities across the sciences, social sciences, and humanities, will be increasingly in greater demand. With climate change, increasing pollution, and depleting natural resources, there will be a sizeable shift in how we meet the world's energy, water, food, and sanitation needs, again resulting in the need for new skilled labour, particularly in biology, chemistry, physics, agriculture, climate science, and social science. The growing emergence of epidemics and pandemics will also call for collaborative research in infectious disease management and development of vaccines and the resultant social issues heightens the need for multidisciplinary learning. There will be a growing demand for humanities and art, as India moves towards becoming a developed country as well as among the third largest economies in the world.

The first education policy was in 1968, introduced by the administration of Mrs. Indira Gandhi. This was replaced by the National education policy in 1986, by her son Mr. Rajiv Gandhi who was Prime Minister at that time. A few years later in 1992, it was slightly modified again by Prime Minister P V Narasimha Rao. And now in 2020, approximately three decades later, a new education policy with drastic changes has been brought in by the ruling government. The details of the policy were released to the nation after cabinet approval on 29th June. It was said that this National Education Policy or NEP 2020, would be a comprehensive framework to guide the development of education in the country.

The NEP 2020

Which proposes sweeping changes, since its introduction. The policy is supposed to address seven key issues of educational development namely easy access for the students, ease of participation, and quality of courses offered, equity, system efficiency, governance and management, facilities of research and development, and financial commitment involved. Does NEP 2020 truly satisfy these criteria? What are the hits and misses of the policy?

The new policy proffers a single regulator for higher education institutions, multiple entry and exit options in degree courses, and discontinuation of M.Phil. programs, low stakes board exams, and common entrance exams for universities. It also aims to universalize access to school education at all levels, pre-primary to secondary level with 100 percent Gross Enrollment Ratio (GER) in school education by 2030 and proffer foundational literacy and numeracy for all.

The school curriculum structure, which is now 10+2, will be replaced with a "5+3+3+4" structure thereby ensuring inclusion of children of all ages (3-18 years) under the ambit of formal schooling in a significant shift from the 1986 policy. This new policy also seeks to ensure that no student is at a disadvantage because they are from a socially and Economically Disadvantaged Group (SEDG). Gender Inclusion Fund and Special Education Zones will be instituted for this purpose.

It is also suggested in the policy that the medium of education until at least grade 5 should optionally be in the regional language, mother tongue or local language. Sanskrit, an Indic language of the ancient Indian subcontinent, will now be mainstreamed in schools as one of the language options in the present three-language formula. Indian Sign Language (ISL) will also be standardized throughout the country and a new curriculum will be developed for deaf children.

The new policy proposes a shift from an assessment that is based on the outcome of a program to a year-round assessment structure. This entails reduction of curricular content and rote learning and supplements it with conceptual learning, experimentation, and critical thinking. The aim is for this era of Indian students to receive a holistic model of learning, well equipped with cutting edge skills necessary to excel in the 21st century.

Additionally, rigid demarcation of streams or subjects will be removed. There will now be flexibility to choose from interests within arts and sciences, vocational and academic streams as well as curricular and extra-curricular activities. Vocational education will begin from grade six and include 'Bagless days' or internship. This will open a real-world understanding of their subject of interest from local experts and inculcate sundry skills at an early age.

Another new feather in the new policy is adding coding as a subject from grade 6. In this increasingly technological era, coding may become the language of the future. And being well equipped in this will ensure no hindrances to innovation and creativity whilst promoting analytical and logical thinking. This new structure will not only be beneficial to school children but also be in tune with the best global practices for the development of the mental faculties of a child.

Prime Minister Narendra Modi stated that the new education policy will transform

millions of lives towards making India a knowledge hub in an era where learning, research, and innovation are important. However, is there more to this policy that was unceremoniously approved by the Union cabinet without any discussion and debate? In India, education is a lucrative field for politicians as it gives them political and ideological mileage for years. While vital reforms needed in the education sector, such as widening the availability of scholarships, strengthening infrastructure for open and distance learning, online education and increasing usage of technology are reflected in the new policy, it is also a political document which can be apprehended from comments of political and ideological organizations.

Draft bill Education

The policy's causes for concern are being debated on all over social media with #RejectNEP2020 trending on twitter. According to the Indian constitution, regulations of different sectors of society are demarcated by three different lists, namely the Union list, the State list, and Concurrent list. As these names suggest, the Union government makes laws on matters in the union list, the state government makes laws on issues under the State list and both the union and state government govern matters under the concurrent list. When laws are to be made on topics under the concurrent list, it is first put up as a draft for a threshold period. This threshold period is to encourage suggestions and discourse from the states or eminent personalities from the respective field of the draft bill. Education is listed as a concurrent subject. However, the NEP 2020 was bypassed in the parliament, thereby violating the above code of conduct. A new policy introducing such substantial changes must undergo discourse in the parliament. The government bypassed oppositions and objections of various State governments. Could this be a drive to substitute an already broken system of education with a centralized, communalized and commercialized education system?

National Education Policy 2020

- a) Provide independent evidence-based advice to Central and State Government agencies on technology-based interventions;
- b) Build intellectual and institutional capacities in educational technology;
- c) Envision strategic thrust areas in this domain; and
- d) Articulate new directions for research and innovation

The English language is not only paramount value for global outreach, but it is also essential in connecting and communicating with people from other states within India. Career building, outsourcing technical support and skills are dominated by western conglomerates where English has utmost importance. In the new scheme, English will only be offered from the secondary level. Children from families who cannot afford to polish their children's English competence will lose out on opportunities. Discontinuing English as the main medium might make fluency in English based on whether you can afford private tutors, thus disadvantaging the lower caste population who see English as a way to escape caste hierarchy. Mainstreaming Sanskrit in India would be synonymous to the west mainstreaming Latin. Biblical Latin is a dead language; similarly, Sanskrit is used by less than 1% of the Indian population.

Mainstreaming this ancient language would only be seen as a regressive step. At the time of the 2001 census on bilingualism and trilingualism, the number of English speakers in India was at 125 million and this number ought to have increased since then. The English language is what has given India an edge over a majority of south-east Asia. Even the Chinese government, who until recently only promoted the Chinese medium, is bringing in reforms and introducing the English language in their education system.

National Education Policy 2020

Different approach. There are numerous challenges to conducting online examinations at scale, including limitations on the types of questions that can be asked in an online environment, handling network and power disruptions, and preventing unethical practices. Certain types of courses/subjects, such as performing arts and science practical have limitations in the online/digital education space, which can be overcome to a partial extent with innovative measures. Further, unless online education is blended with experiential and activity-based learning, it will tend to become a screen-based education with limited focus on the social, affective and psychomotor dimensions of learning.

Given the emergence of digital technologies and the emerging importance of leveraging technology for teaching-learning at all levels from school to higher education, this Policy recommends the following key initiatives:

(a) Pilot studies for online education: Appropriate agencies, such as the NETF, CIET, NIOS, IGNOU, IITs, NITs, etc. will be identified to conduct a series of pilot studies, in parallel, to evaluate the benefits of integrating education with online education while mitigating the downsides and also to study related areas, such as, student device addiction, most preferred formats of e-content, etc. The results of these pilot studies will be publicly communicated and used for continuous improvement.

- (b) Digital infrastructure: There is a need to invest in creation of open, interoperable, evolvable, public digital infrastructure in the education sector that can be used by multiple platforms and point solutions, to solve for India's scale, diversity, complexity and device penetration. This will ensure that the technology-based solutions do not become outdated with the rapid advances in technology.
- (c) Online teaching platform and tools: Appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a structured, user-friendly, rich set of assistive tools for monitoring progress of learners. Tools, such as, two-way video and twoway-audio interface for holding online classes are a real necessity as the present pandemic has shown.
- (d) Content creation, digital repository, and dissemination: A digital repository of content including creation of coursework, Learning Games & Simulations, Augmented Reality and Virtual Reality will be developed, with a clear public system for ratings by users on effectiveness and quality. For fun based learning student-appropriate tools like apps, gamification of Indian art and culture, in multiple languages, with clear operating instructions, will also be created.

A reliable backup mechanism for disseminating e-content to students will be provided.

- (e) Addressing the digital divide: Given the fact that there still persists a substantial section of the population whose digital access is highly limited, the existing mass media, such as television, radio, and community radio will be extensively used for telecast and broadcasts. Such educational programmes will be made available 24/7 in different languages to cater to the varying needs of the student population. A special focus on content in all Indian languages will be emphasized and required; digital content will need to reach the teachers and students in their medium of instruction as far as possible.
- (f) Virtual Labs: Existing e-learning platforms such as DIKSHA, SWAYAM and SWAYAMPRABHA will also be leveraged for creating virtual labs so that all students have equal access to quality practical and hands-on experiment-based learning experiences. The possibility of providing adequate access to SEDG students and teachers through suitable digital devices, such as tablets with preloaded content, will be considered and developed.
- (g) Training and incentives for teachers: Teachers will undergo rigorous training in learner-centric pedagogy and on how to become high-quality online content creators themselves using online teaching platforms and tools. There will be emphasis on the teacher's role in facilitating active student engagement with the content and with each other.
- (h) Online assessment & examinations: Appropriate bodies, such as the proposed

National Assessment Centre or PARAKH, School Boards, NTA, and other identified bodies will design and implement assessment frameworks encompassing design of competencies, portfolio, rubrics, standardized assessments, and assessment analytics. Studies will be undertaken to pilot new ways of assessment using education technologies focusing on 21st century skills.

- (i) Blended models of learning: While promoting digital learning and education, the importance of face-to-face in-person learning is fully recognized. Accordingly, different effective models of blended learning will be identified for appropriate replication for different subjects.
- (j) Laying down standards: As research on online/digital education emerges, NETF and other appropriate bodies shall set up standards of content, technology, and pedagogy for online/digital teachinglearning. These standards will help to formulate guidelines for e-learning by States, Boards, schools and school complexes, HEIs, etc.

Under the new policy, private and selfgoverned colleges will receive more autonomy. When these colleges hand out certifications unchecked, corporatism will follow. This will create a situation where higher studies become a privilege only for those who can afford it. A centralized education system will amount to a stepping stone to social exclusion and dilution of the Right to Education Act. The government stated that it is proposing to improve the quality and autonomy of higher education, however, in a completely backward move; it is dismantling the University Grants Commission (UGC) which was a core structural and regulatory body for higher education. This will only accelerate the commodification and centralization of education, which is perilous considering the probability of the ruling party pushing its ideological and capital requirements. This is in fact not the first time such a move was attempted. The Atal Bihari Vajpayee Government tried to bring in similar reforms but was met with strong opposition. The present education reforms have come into being only as it was passed through the backdoor without the consent of the parliament.

Organizations and institutions when vested with educational structure and financial autonomy will be enabled to create additional courses and departments. However, without funding from government bodies, institutions will naturally turn to the students. The tuition fee will substantially increase, not just for students in that particular department, but all the students attending that institution. This coupled with another feature offered by the NEP, i.e., multiple exit options at universities will increase the dropout rates. Under the multiple exit and entry option, if a student decides to leave mid-course, he/she will receive appropriate certification for credits earned until that point which will be digitally stored in an Academic Bank of Credit (ABC). A 'certificate', a 'diploma', a 'Bachelor's degree' and 'Bachelor's Degree with Research' respectively will be awarded for each year of a four-year course. With financial autonomy resulting in financial burden on students and availability of certification each year, more students will be prompted to dropout. This creates an immense disparity between financially able and disabled students. Financially better-off students will get higher chances for studies and be able to acquire better opportunities. This would again amount to dilution of the Right to Education Act.

The government has introduced vocational and polytechnic education for school students through the new policy under the title 'Reimagining vocational education', which aims to remove the hard separation between academic and vocational streams. Vocational subjects will be introduced as early as grade 6, including internship opportunities from grades 6 to 12. This however ignores the importance of ensuring basic mainstream education to all students till at least grade 10. Students opting for such courses will certainly not be from privileged backgrounds. Children who are economically backward and belonging to lower castes who struggle in English, coding, etc would end up opting for these streams. Introducing this at such an early age will form a barrier for first-generation learners and those from disadvantaged backgrounds to access higher education.

NEP Recommendations for Multidisciplinary Higher Education in India

NEP discusses the ancient Indian education system in which subjects such as science and medicine were clubbed as 'arts' or 'Kalaas' along with subjects such as communication, vocational skills, singing etc. It plans to bring the practice of liberal arts or knowledge of many arts into the Indian education system. NEP aims to take a more holistic approach towards providing higher education in India.Given below are the highlights of the NEP's recommendations to move India towards a more multidisciplinary higher education system.

Complete Revamp of HEIs in India

NEP does not plan merely an incremental but a complete revamp of higher education in India. It wants to shift the image of a university to a place of higher learning

providing education in multiple streams. The policy will assess humanities subjects along with the STEM studies and increase the level of research in Indian universities.

Multidisciplinary Education and Research Universities (MERU)

NEP talks about setting up public universities offering multidisciplinary education. These universities will maintain educational standards comparable to those of IITs and IIMs, and will be the face of quality education in India.

While NEP 2020 aims for many muchneeded positive changes, the backdoor passing of the bill and the possibility of amplifying existing fault lines in Indian society needs to be looked into. The policy will seemingly increase the economic divide in a country that is already divided by religion, caste, gender, and wealth. It makes it nearly impossible for disadvantaged classes to climb up the social ladder.

The NEP supposedly envisages decolonizing young Indian mind; however, in reality could that translate to the saffronisation of education? Earlier this year crucial topics for students, such as democratic rights, challenges to democracy, citizenship, food security, gender, religion, caste, and secularism were dropped from the syllabus. Are all of these moves stepping stones to achieve saffronisation? In this scenario holistic, interdisciplinary, multidisciplinary, overall learning could possibly be a front to cover all the above aspects. It will take years before the policy goes into full swing and only then will these complexities become apparent. The method of implementation will determine its successes and failures. The flaws in this policy need to be addressed with deliberation through

proper code of conduct to reduce the current shortfalls.

Education

Universalization of education from preschool to secondary level with 100% Gross Enrolment Ratio (GER) in school education by 2030.

- * To bring 2 crore out of school children back into the mainstream through an open schooling system.
- * The current 10+2 system to be replaced by a new 5+3+3+4 curricular structure corresponding to ages 3-8, 8-11, 11-14, and 14-18 years respectively.

It will bring the uncovered age group of 3-6 years under school curriculum, which has been recognized globally as the crucial stage for development of mental faculties of a child.

- * It will also have 12 years of schooling with three years of Anganwadi/ pre schooling.
- * Class 10 and 12 board examinations to be made easier, to test core competencies rather than memorised facts, with all students allowed to take the exam twice.
- * School governance is set to change, with a new accreditation framework and an independent authority to regulate both public and private schools.
- * Emphasis on Foundational Literacy and Numeracy, no rigid separation between academic streams, extracurricular, vocational streams in schools.
- Vocational Education to start from Class
 6 with Internships.
- * Teaching up to at least Grade 5 to be in mother tongue/regional language. No language will be imposed on any student.

India National Education Policy (NEP) 2020

- * Assessment reforms with 360 degree Holistic Progress Card, tracking Student Progress for achieving Learning Outcomes
- * A new and comprehensive National Curriculum Framework for Teacher Education (NCFTE) 2021, will be formulated by the National Council for Teacher Education (NCTE) in consultation with
- * National Council of Educational Research and Training (NCERT).
- * By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree.

Higher Education

Gross Enrolment Ratio in higher education to be raised to 50% by 2035. Also, 3.5 crore seats to be added in higher education.

- * The current Gross Enrolment Ratio (GER) in higher education is 26.3%.
- * Holistic Undergraduate education with a flexible curriculum can be of 3 or 4 years with multiple exit options and appropriate certification within this period.
- * M.Phil courses will be discontinued and all the courses at undergraduate, postgraduate and PhD level will now be interdisciplinary.
- * Academic Bank of Credits to be established to facilitate Transfer of Credits.
- * Multidisciplinary Education and Research Universities (MERUs), at par with IITs, IIMs, to be set up as models of best multidisciplinary education of global standards in the country.
- * The National Research Foundation will be created as an apex body for fostering

a strong research culture and building research capacity across higher education.

- * Higher Education Commission of India (HECI) will be set up as a single umbrella body for the entire higher education, excluding medical and legal education. Public and private higher education institutions will be governed by the same set of norms for regulation, accreditation and academic standards. Also, HECI will be having four independent verticals namely,
- * National Higher Education Regulatory Council (NHERC) for regulation,
- * General Education Council (GEC) for standard setting,
- * Higher Education Grants Council (HEGC) for funding,
- * National Accreditation Council (NAC) for accreditation.
- Affiliation of colleges is to be phased out in 15 years and a stage-wise mechanism to be established for granting graded autonomy to colleges.
- * Over a period of time, every college is expected to develop into either an autonomous degree-granting College, or a constituent college of a university.

Other Changes

- * An autonomous body, the National Educational Technology Forum (NETF), will be created to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration.
- * National Assessment Centre-'PARAKH' has been created to assess the students.

Journal of Education & Pedagogy

- * It also paves the way for foreign universities to set up campuses in India.
- * It emphasizes setting up of Gender Inclusion Fund, Special Education Zones for disadvantaged regions and groups.
- * National Institute for Pali, Persian and Prakrit, Indian Institute of Translation and Interpretation to be set up.
- * It also aims to increase the public investment in the Education sector to reach 6% of GDP at the earliest.
- * Currently, India spends around 4.6 % of its total GDP on education.

Education in India

Constitutional Provisions

- * Part IV of Indian Constitution, Article 45 and Article 39 (f) of Directive Principles of State Policy (DPSP), has a provision for state-funded as well as equitable and accessible education.
- * The 42nd Amendment to the Constitution in 1976 moved education from the State to the Concurrent List.
- * The education policies by the Central government provides a broad direction and state governments are expected to follow it. But it is not mandatory, for instance Tamil Nadu does not follow the three-language formula prescribed by the first education policy in 1968.
- * The 86th Amendment in 2002 made education an enforceable right under Article 21-A.

Related Laws

* Right To Education (RTE) Act, 2009 aims to provide primary education to all children aged 6 to 14 years and enforces education as a Fundamental Right. * It also mandates 25% reservation for disadvantaged sections of the society where disadvantaged groups

Government Initiatives

* Sarva Shiksha Abhiyan, Mid Day Meal Scheme, Navodaya Vidyalayas (NVS schools), Kendriya Vidyalayas (KV schools) and use of IT in education are a result of the NEP of 1986.

Way Forward

- * A New Education Policy aims to facilitate an inclusive, participatory and holistic approach, which takes into consideration field experiences, empirical research, stakeholder feedback, as well as lessons learned from best practices.
- * It is a progressive shift towards a more scientific approach to education. The prescribed structure will help to cater the ability of the child - stages of cognitive development as well as social and physical awareness. If implemented in its true vision, the new structure can bring India at par with the leading countries of the world.

The Union Cabinet approved a new National Education Policy on July 29, after a 34-year gap. The National Education Policy, 2020 is meant to provide an overarching vision and comprehensive framework for both school and higher education across the country. The new NEP, approved by the Cabinet, has not been presented in Parliament. It is the first to be formulated by a Bharatiya Janata Party government and the first in the 21st century. It is only a policy, not a law; implementation of its proposals depends on further regulations by both States and the Centre as education is a concurrent subject.

What is the timeline for implementation?

The policy is meant to transform the education system by 2040. Some proposals will be implemented immediately, starting with the change in the name of the Ministry of Human Resource Development into the Ministry of Education. "There are over 100 action points from the Policy. Implementation will be done in phases, based on time, region and types of institutions with Institutes of Eminence (IoEs) and Central Universities taking the lead," said Higher Education Secretary Amit Khare. For instance, four-year undergraduate degrees with multiple entry-exit options will be introduced in the 20 IoEs from the 2020-21 academic year, while others continue with the existing three-year degree courses. Existing M.Phil students can continue until they complete their degree, although new admissions for the programme will not be accepted.

The National Testing Agency will introduce a pilot version of the common entrance test by December 2020, which will be used for admission to all IoEs and central universities in 2021. Some Indian Institutes of Technology are working on developing the technical structure of the Academic Credit Bank, which will also be established by December, and become applicable to all new students joining central universities next year.

Where do the difficulties lie?

Some of the proposals require legal changes. The draft Higher Education Commission of India Bill has been languishing in the Ministry for over a year, but is likely to be published for feedback by September. The proposal for a Board of Governors for universities may also require amendments of the Central and State Universities Acts. A Cabinet note has already been moved to set up the National Research Foundation as a trust under the government, but in order to make it a fully autonomous body, an Act may be required.

Others require funding. Free breakfasts can only be considered in the next academic year if a budget allocation is made to cover it. The process of converting affiliated colleges into degree granting autonomous institutions and then further into fully fledged universities is estimated to take at least 15 years, as the Centre will have to provide financial assistance for this purpose. The Ministry feels that an increase in government funding of education to 6% of GDP will be sufficient to cover the financial implications of the NEP. However, such an increase in funding has been proposed but not achieved for the last half-century, point out experts. The proposal to make the mother tongue the medium of instruction till Class 5, which has stirred up the fiercest debates, is dependent on State governments, according to the Education Minister, who would not even confirm that the policy will be implemented by centrally-run schools.

Expenditure 2017-18) and only around 10% of the total Government spending towards education (Economic Survey 2017-18). These numbers are far smaller than most developed and developing countries. In order to attain the goal of education with excellence and the corresponding multitude of benefits to this Nation and its economy, this Policy unequivocally endorses and envisions a substantial increase in public investment in education by both the Central government and all State Governments. The Centre and the States will work together to increase the public investment in Education sector to reach 6% of GDP at the earliest. This is considered extremely critical for achieving the high-quality and equitable public education system that is truly needed for India's future economic, social, cultural, intellectual and technological progress and growth. In particular, financial support will be provided to various critical elements and components of education, such as ensuring universal access, learning resources, nutritional support, matters of student safety and wellbeing, adequate numbers of teachers and staff, teacher development, and support for all key initiatives towards equitable high-quality education for underprivileged and socioeconomically disadvantaged groups.

In addition to one-time expenditures, primarily related to infrastructure and resources, this Policy identifies the following key long-term thrust areas for financing to cultivate an education system: (a) universal provisioning of quality early childhood care education; (b) ensuring foundational literacy and numeracy; (c) providing adequate and appropriate resourcing of school complexes/ clusters; (d) providing food and nutrition (breakfast and midday meals); (e) investing in teacher education and continuing professional development of teachers; (f) revamping colleges and universities to foster excellence; (g) cultivating research; and (h) extensive use of technology and online education. Even the low level of funding on education in India, is frequently not spent in a timely manner at the District/institution level, hampering the achievement of the intended targets of those funds. Hence, the need is to increase efficiency in use of available budget by suitable policy changes. Financial governance and management will focus on the smooth, timely, and appropriate flow of funds, and their usage with probity; administrative processes will be suitably amended and streamlined so that the

disbursal mechanism may not lead to a high volume of unspent balances. The provisions of GFR, PFMS and 'Just in Time' release to implementing agencies will be followed for efficient use of government resources and avoiding parking of funds. Mechanism of performance based funding to States / HEIs may be devised. Similarly, efficient mechanism will be ensured for the optimal allocation and utilization of funds earmarked for SEDGs. The new suggested regulatory regime, with clear separations of roles and transparent selfdisclosures, empowerment and autonomy to institutions, and the appointment of outstanding and qualified experts to leadership positions will help to enable a far smoother, quicker, and more transparent flow of funds.

The Policy also calls for the rejuvenation, active promotion, and support for private philanthropic activity in the education sector. In particular, over and above the public budgetary support which would have been otherwise provided to them, any public institution can take initiatives towards raising private philanthropic funds to enhance educational experiences. The matter of commercialization of education has been dealt with by the Policy through multiple relevant fronts, including: the 'light but tight' regulatory approach that mandates full public selfdisclosure of finances, procedures, course and programme offerings, and educational outcomes; the substantial investment in public education; and mechanisms for good governance of all institutions, public and private. Similarly, opportunities for higher cost recovery without affecting the needy or deserving sections will also be explored.

Conclusion

Any policy's effectiveness depends on

its implementation. Such implementation will require multiple initiatives and actions, which will have to be taken by multiple bodies in a synchronized and National Education Policy 2020 systematic manner. Therefore, the implementation of this Policy will be led by various bodies including MHRD, CABE, Union and State Governments, educationrelated Ministries, State Departments of Education, Boards, NTA, the regulatory bodies of school and higher education, NCERT, SCERTs, schools, and HEIs along with timelines and a plan for review, in order to ensure that the policy is implemented in its spirit and intent, through coherence in planning and synergy across all these bodies involved in education. Finally, careful analysis and review of the linkages between multiple parallel implementation steps is necessary. This will also include early investment in some of the specific actions (such as the setting up of early childhood care and education infrastructure) that will be imperative to ensuring a strong base and a smooth progression for all subsequent programmes and actions.

Reference

- Chaturvedi, Amit (2020). Transformative': Leaders, academicians welcome National Education Policy. Hindustan Times. Retrieved 30 July 2020. While the last policy was announced in 1992, it was essentially a rehash of a 1986 one.
- Chopra, Ritika (2020). Explained: Reading the new National Education Policy 2020. The Indian Express. Retrieved 2 August 2020.
- Easier board exams with two attempts a year: HRD suggests in Draft Education Policy. India Today. Press Trust of India New. 4 November 2019. Retrieved 31 July 2020.
- Free Entry- Exit Options Introduced For Students in NEP 2020. NDTV.com. Retrieved 21 September 2020.
- Gohain, Manash Pratim (2020). NEP language policy broad guideline: Government. The Times of India. Retrieved 31 July 2020.
- Jebaraj, Priscilla (2020). "The Hindu Explains What has the National Education Policy 2020 proposed?". The Hindu. ISSN 0971-751X. Retrieved 2 August 2020.
- Jugantar Mishra, Balaiada R. Dkhar Job Satisfaction of Teacher Educators: A Study in Relation to Gender and Types of Management International Journal of Research on Social and Natural Sciences Vol. I Issue 1 June 2016
- Krishna, Atul (2020). "NEP 2020 Highlights: School And Higher Education". NDTV. Retrieved 31 July 2020.
- Kulkarni, Sagar (2020). New policy offers 5-3-3-4 model of school education. Deccan Herald. Retrieved 9 August 2020.
- Kumar, Manoj (2020). "India opens door for foreign universities under new education policy". Reuters. Retrieved 31 July 2020.
- Kumar, Shuchita (2020). "New education policy: The shift from 10+2 to 5+3+3+4 system". Times Now. Retrieved 9 August 2020.

- Kumari, Anisha, ed. (2020). "National Education Policy 2020: UGC, AICTE, NAAC to Be Merged In a New Body". NDTV.com. Retrieved 9 August2020.
- Madhuparna Bhattacharya & Debjani Guha Child Labour and Education: The Indian ScenarioInternational Journal of Research on Social and Natural Sciences Vol. I Issue 2 December 2016 Pp95-100
- Nandini, ed. (2020). New Education Policy 2020 Highlights: School and higher education to see major changes. Hindustan Times. Retrieved 30 July2020.
- Narendra Jadhav (2020) Future Of The Indian Education System: How Relevant Is The National Education Policy, 2020? Konark Publishers Pvt. Ltd.
- National Education Policy 2020: Cabinet approves new national education policy: Key points. The Times of India. 29 July 2020. Retrieved 29 July 2020.
- National Education Policy: NTA to conduct common entrance exam for higher education institutes. The Indian Express. 29 July 2020. Retrieved 30 July 2020.
- Praveen Jha Pooja Parvati, National Education Policy, 2020 Long on Rhetoric and Short on Substance EPW journal Vol. 55, Issue No. 34, 22 Aug, 2020.
- Radhakrishnan, Akila (2020). "Draft New Education Policy and Schools for the Skilling Age". The Hindu Center. Retrieved 31 July 2020.
- Rohatgi, Anubha, ed. (2020). Highlights NEP will play role in reducing gap between research and education in India: PM Modi. Hindustan Times. Retrieved 8 August 2020.
- Saumen Chattopadhyay, National Education Policy, 2020 An Uncertain Future for Indian Higher Education EPW Journal Vol. 55, Issue No. 46, 21 Nov, 2020
- Shukla, Amandeep (2020). "New Education Policy 2020: NEP moots professional standards for teachers". Hindustan Times. Retrieved 9 August 2020.
- Shukla, Amandeep (2020). National Education Policy 2020: UGC, AICTE era over, NEP moots HECI, single regulator with 4 verticals". Hindustan Times. Retrieved 31 July 2020.
- Srinivasan, Chandrashekar, ed. (2020). "National Education Policy, NEP 2020: Teaching in Mother Tongue Till Class 5: 10 Points on New Education Policy". NDTV. Retrieved 29 July 2020.
- State education boards to be regulated by national body: Draft NEP. The Times of India. Retrieved 21 November 2019.
- Union Cabinet Approves New National Education Policy NDTV. 29 July 2020. Retrieved 29 July 2020.

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 57-68

Professional Learning Needs and Development in Teachers in Telangana State: A View

Naveen Verpula*

ABSTRACT

This paper explains the importance of professional learning and development throughout the career span which is very important for a professional in any field and it is equally important for teachers and teacher educators. To qualify as a professional requires certain standards, both from the system and the practitioner. In case of teaching, it is expected that the system gives the teacher autonomy, responsibility, freedom and power - in the classroom as well as in a more holistic sense. A transparent governance system demands that the teacher be motivated and while empowering his/her competency to lead the school and the community. Monetary benefits cannot be the sole criterion for defining a professional. Teacher education and professional development involve lifelong growth and continuous learning. They are needed to consolidate learning but are also required for keeping motivation alive and for adapting to changes. While talking of the needs of and expectations from the teachers we should not ignore the teacher educators. The same, if not higher, level of professionalism is demanded from teacher educators. At the same time, it should not be forgotten that teacher educators too need resources and 31 avenues for their professional development if they are to remain motivated and up to date with the innovations in the field. Therefore, this paper specially highlights the significance of professional learning needs and development in teachers. **Key words:** Professional learning, Professional development, Teacher competency.

Introduction

In education, the term professional development may be used in reference to a wide variety of specialized training, formal education, or advanced professional learning intended to help administrators, teachers, and other educators improve their professional knowledge, competence, skill, and effectiveness. When the term is used in education contexts without qualification, specific examples, or additional explanation, however, it may be difficult to determine precisely what "professional development" is referring to.

In practice, professional development for educators encompasses an extremely broad range of topics and formats. For example, professional-development experiences may be

 * TGT Physical Science, T S Model School, Valigonda (M), Yadadri Bhuvanagiri (D), Telangana Email: naveenverpua84@gmail.com Professional Learning Needs and Development in Teachers in Telangana State: A View

funded by district, school, or state budgets and programs, or they may be supported by a foundation grant or other private funding source. They may range from a one-day conference to a two-week workshop to a multiyear advanced-degree program. They may be delivered in person or online, during the school day or outside of normal school hours, and through one-on-one interactions or in group situations. And they may be led and facilitated by educators within a school or provided by outside consultants or organizations hired by a school or district. And, of course, the list of possible formats could go on.

The following are a representative selection of common professional-development topics and objectives for educators:

- * Furthering education and knowledge in a teacher's subject area-e.g., learning new scientific theories, expanding knowledge of different historical periods, or learning how to teach subject-area content and concepts more effectively.
- * Training or mentoring in specialized teaching techniques that can be used in many different subject areas, such as differentiation (varying teaching techniques based on student learning needs and interests) or literacy strategies (techniques for improving reading and writing skills), for example.
- * Earning certification in a particular educational approach or program, usually from a university or other credentialing organization, such as teaching Advanced Placement courses or career and technical programs that culminate in students earning an industry-specific certification.

- * Developing technical, quantitative, and analytical skills that can be used to analyze student-performance data, and then use the findings to make modifications to academic programs and teaching techniques.
- * Learning new technological skills, such as how to use interactive whiteboards or course-management systems in ways that can improve teaching effectiveness and student performance.
- * Improving fundamental teaching techniques, such as how to manage a classroom effectively or frame questions in ways that elicit deeper thinking and more substantive answers from students.
- * Working with colleagues, such as in professional learning communities, to develop teaching skills collaboratively or create new interdisciplinary courses that are taught by teams of two or more teachers.
- * Developing specialized skills to better teach and support certain populations of students, such as students with learning disabilities or students who are not proficient in English.
- * Acquiring leadership skills, such as skills that can be used to develop and coordinate a school-improvement initiative or a community-volunteer program. For related discussions, see leadership team and shared leadership.
- * Pairing new and beginning teachers with more experienced "mentor teachers" or "instructional coaches" who model effective teaching strategies, expose lessexperienced teachers to new ideas and skills, and provide constructive feedback and professional guidance.

- * Conducting action research to gain a better understanding of what's working or not working in a school's academic program, and then using the findings to improve educational quality and results.
- * Earning additional formal certifications, such as the National Board for Professional Teaching Standards certification, which requires educators to spend a considerable amount of time recording, analyzing, and reflecting on their teaching practice (many states provide incentives for teachers to obtain National Board Certification).
- * Attending graduate school to earn an advanced degree, such as a master's degree or doctorate in education, educational leadership, or a specialized field of education such as literacy or technology.
- * Teachers engage in professional learning to stimulate their thinking and professional knowledge and to ensure that their practice is critically informed and current.

When a wide range of high-quality, sustained professional learning experiences are undertaken, teachers are more likely to inspire pupils and provide high-quality teaching and learning experiences, enabling learners to achieve their best. It is important that professional learning provides rich opportunities for teachers to develop and enhance their professional knowledge and practice, in order to progress the quality of learning and teaching and school improvement.

Teacher professional learning is of increasing interest as a critical way to support the increasingly complex skills students need to learn in order to succeed in the 21st century. Sophisticated forms of teaching are needed to develop student competencies such as deep mastery of challenging content, critical thinking, complex problem solving, effective communication and collaboration, and selfdirection. In turn, effective professional development is needed to help teachers learn and refine the instructional strategies required to teach these skills.

Teacher professional learning is of increasing interest as a critical way to support the increasingly complex skills students need to learn in order to succeed in the 21st century. Sophisticated forms of teaching are needed to develop student competencies such as deep mastery of challenging content, critical thinking, complex problem solving, effective communication and collaboration, and selfdirection. In turn, effective professional development is needed to help teachers learn and refine the instructional strategies required to teach these skills.

Research Objectives

- 1. To study the importance of teachers professional learning and development.
- 2. To explain the importance of teachers professional learning and development.
- 3. To understand the attitude of teachers towards their professional learning needs and development.
- 4. To find out the challenges in teachers professional learning and development.
- 5. To explain the role of governments in teachers professional training and development.

Need for Research

The need for teacher development is vital in an environment where educational goals for

schools, teachers and students are high. Teachers are expected to help students become critical, constructive thinkers who have developed thorough conceptual understandings. Students are required to synthesize information, solve problems, invent new ideas, create models, and explain themselves with confidence and proficiency. Classrooms are viewed as places where rich discourse should take place as students engage in their work and explore problems with meaningful contexts.

The traditional approach to teaching is a long-established style and is especially prevalent in schools amongst older teachers who were taught, and have long been teaching in this manner. It consists of the mastery of concepts and procedures as the ultimate goal of instruction and places little emphasis on the processes of geography, or on the knowledge that comes out of geographical problem situations. There is therefore a strong contemporary need for teacher development. Modern curricula and new theory also indicate that a move is necessary from the over reliance of teaching practices where exposition and individual seatwork exist, towards activities that promote students' involvement in constructing, applying, and evaluating geographical ideas.

This move is especially important for rural schools where there is a special need for teaching to include more geographical reasoning and problem solving, more communication, and more connections between the geographical ideas and applications. The contemporary approach is premised on constructivism, in which learning is directly focused on the construction of knowledge, and not the traditional transfer of it from the teacher to the student. However, this constructivist approach often takes teachers far beyond their traditional and familiar roles and practices, requiring changes in epistemological perspectives and knowledge of how students learn mathematics. In addition, they also require changes in classroom practices.

In order to give teachers the opportunity to develop and make changes, with support, professional development is necessary. In particular, there is a need for professional development to cater for teachers working in rural schools. The common view that each teacher must find their own style, maintains this individualism and isolation of teaching. Common standards are difficult to develop, and disagreements are masked. The struggles a teacher may be having in their practice, especially in rural are often hidden because of the isolation. It is therefore hoped that by offering the teachers good opportunities for learning, they are then able to critique and challenge alternative practices, with real and helpful debate, facilitating growth.

Teacher Professional Devedlopment

Teachers are undoubtedly the most crucial component of a schooling system. Teachers also happen to be the most costly resource in schools (OECD, 2005). Hence no education reform effort is effective unless the competency of the teachers is ensured. Teacher professional development should hence be considered a national priority from various social and economic perspectives.

With the expansion of the government schooling system in India teachers have been recruited massively over the past two decades. As a result, the average profile of teachers in the country has changed in many ways. One such change is a direct consequence of the recruitment policies of the government under which the states chose to hire contract8 teachers over regular hires.

Furthermore, the 2006 Probe survey report revealed that the educational qualifications of regular and permanent recruits are not likely to differ significantly. However, the latter has significantly greater experience with teacher training. SSA and DIETs have been working persistently to make up for the discrepancy in teacher training levels and to raise the education qualifications of all teachers, by offering in-service teacher training programs to all teachers.

Teacher Professional Development seems a fit approach to enhance the teachers' capabilities and commitment as it encompasses all behaviors which are intended to effect change in the skills, knowledge and experience one gain both formally and informally as one work, beyond any initial training (Allen, 2009). Teachers participate in professional development to "develop, implement, and share practices, knowledge, and values that address the needs of all students" (Schlager, Fusco, Barab, Kling & Gray, 2004), in other words, to get better at being teachers. As summary, Teacher Professional Development can be considered as an ongoing process of education, training, learning and support activities which is: taking place in either external or work-based settings; engaged in by qualified, educational professionals; aimed mainly at promoting learning and development of their professional knowledge, skills and values; to help decide and implement valued changes in their teaching and learning behavior so that they can educate their students more effectively thus achieving an agreed balance between individual, school

and national needs (Earley & Bubb, 2004, p. 5).

Teacher Trainings:

In-service teacher training programs have become a continuous process after NPE-1986, in the State of Andhra Pradesh. Meanwhile a work culture is emerging in which teacher educators, teachers and NGOs are working together for the quality of education. Teachers emerged as textbooks writers, monitoring members, resource persons in the various educational programs. By analyzing the training programs of APEP, DPEP and SSA it may be observed that, as the number of training days increased, the quality decreased. Because of non-availability of subject experts, proper training venues, lack of proper monitoring of training, etc. have become major problems in organizing good trainings. Academic discussions and debates are disappearing in the trainings. Teacher training has again reached a stage of 'useless mechanical activity'. However, the quality initiatives taken up in the Andhra Pradesh such as CLIP, CLAPS and LEP meant for attaining competencies of various subjects created interest and teachers felt happy about them as it was their need.

The training inputs focused majorly on subject approaches, children learning styles, teaching-learning process, evaluation methods, etc. A lot more needs to be done at the Upper Primary Level. When the teacher training programs were conducted during working days a criticism emerged that trainings is hampering the functioning of the school. As an alternative to this criticism for the last 3 years training programs were conducted in the summer vacations. But it is also not a success because of problems like drinking water, toilets, hot temperature in the training classes etc. Only teacher attendance to the training is taken as an indicator for the success of the training. The quality of training is slowly deteriorating. The training modules do not reach in time to the venue; funds are not released in time, course coordinators fail in organizing teacher trainings, etc. We need more funds, better avenues and more qualified subject experts. Giving Earned Leave (which translates into cash) for the teachers attending trainings in the summer has become the motivation for the teachers to attend the trainings. Because of this monitory benefit teachers are not bothered about training inputs questioning the quality of training. Teachers need to realize that they are continuous learners. To overcome the problems and the challenges of teaching profession and for professional development, trainings are the best sources. However, we should not dump the systemic failures on the teachers. All the shortcomings of trainings are of the failures of the system. (It means that because of not identifying right subject experts, not monitoring trainings, not releasing the funds in time, not providing required training material in training venue and the not selecting proper venue, etc. 48 are perhaps the primary reasons for the failure of teacher training programs). Systemic reforms should be taken immediately for better teacher training.

Therefore, A.P. curriculum framework proposes the following: Teacher trainings should be decentralized. The cascade mode, face-to-face model should be redesigned to avoid transaction loss from top to bottom. Provide basic facilities at school complex, MRCs and DIET to emerge as the training and resource centers. Evolve an appropriate strategy to develop resources and trained subject experts to give training, For effective

organization of teacher trainings proper "planning", (including from need assessment to transaction of inputs of training) monitoring and evaluation should be taken care of. The observations of monitoring officers, results of external evaluation should be taken into consideration for further planning and implementation of training inputs. The tradition of giving training to all the teachers on the same topic should be withdrawn. In place of this by declaring training components well in advance the teachers may be requested to participate in the trainings as per their needs. Freedom should be given to the teacher to select and participate in the training. Training strategies should be changed for effective training sessions. In place of lecturing and routine group works, reading and referring to books, preparing reports, books reviews, discussions and application of training inputs to regular classroom transaction should be encouraged. An action plan for training strategies should be evolved. Trainings should not be with isolated strategies like only face - face, or only teleconference. But an integration of several strategies with the help of technologies should be evolved. Face-face, teleconferencing, phone-in programs, audio and video presentations, using internet and library or any source of information to work on tasks given in the training program, consulting experts through e-mails or networking etc. should be integrated. This integration of technology and human contact will enrich the training. Training impact studies, external evaluation should be done for the better results of the training. Study culture should be inculcated among teachers. For this purpose, school libraries should be strengthened. For professional development, school complexes should function effectively. Distance education courses should be designed and made accessible for teachers. Subject forums, networking systems should be strengthened. Research programs shall be made mandatory for teachers. To enhance due respect for teachers, let teachers themselves formulate their own code of conduct and follow it voluntarily without any kind of impositions. Teachers are treated as tools in a system rather than individuals. They should not be criticized, humiliated, disrespected and ill-treated publicly in meetings and conferences. (SCF)-2011

For close to a decade now, since the introduction of NCF 2005, efforts are on to bring about changes as per the idea of quality school education. The biggest learning in all these processes is that these efforts cannot be independent of teacher education and professional development and any reform at the school level needs to be mirrored in teachers' preparation and training. While syllabus reform and textbook development have, to a certain extent, kept pace with the curricular reforms, changes in teacher education curriculum have not been forthcoming. As a result, the quality of our teachers is proving to be a major bottleneck in improving the classroom processes. While acknowledging that the quality of the teachers needs improvement, the onus of this exercise should not be left to them and the State has to play a leading role. Teacher education and development includes the interlinked strands of pre-service and in-service teacher preparation, and teacher professional development. But for too long programs for these have been conceptualized in isolation.

Teacher education policies need to be formulated as a whole. The curriculum, structures, programs and institutions involved need to be re-looked at and opportunities

developed for linkages between them. Teachers require a space where they can meet their peers and teacher educators on an equal footing to critically examine their view point, alter their view of education, children and realign their understandings of what a good classroom must be. The idea of an ideal classroom and a good teacher undergoes modifications from time to time. The teacher preparation and development programs should enable teachers to examine these ideas and if they appear sound, to willingly change themselves accordingly. Many teachers have seen a shift in their lifetime from the point where they were the sole source and deliverer of knowledge to now where they have to facilitate the construction of knowledge by the child. Teachers need help in what to them may appear as making a leap of 43 faith. This requires breaking the isolation of the teacher providing opportunities to learn beyond standard trainings. The position paper serves to highlight the various concerns associated with the status of teacher education in Andhra and also suggests Pradesh some recommendations for the future. It seeks to answer the question of sustaining the teachers' and teacher educators' motivation, issues of accountability of the teacher, linking the current educational thinking to practice in the schools, addressing the challenges posed by RTE 2009.

Specifically, it emphasizes the following: In Pre- service teacher education. Restructuring of teacher education curriculum towards orienting teachers for implementation of SCF-2011. Flexibility in the curriculum to ensure that it can be modified according to the context while following certain broad guidelines. Nature of guidelines: The curriculum should redefine its theoretical component to inculcate in the student-teachers the habit of analysis, argumentation and synthesis of their experiences. Practice of theory and field based understanding should be given top priority. The curriculum should address the mind sets, assumption and beliefs of the student-teachers regarding the nature of the child and her potential, about learning, subjects, and the teaching learning process. The nature of school experience program (SEP) and regular teacher learning process at teacher education institutions should be revised. A 4 year duration degree course i.e. Bachelor of Elementary Education can be started similar to the Delhi University initiative. Similarly, at post-graduate level, MA (Elementary Education) may be introduced. A diploma course for ECCE may be started in the state in all DIETS. In-service teacher education. Curriculum for the in-service teacher education should address the needs of the teachers based on whether they have had any pre-service preparation or not. The existing academic status and performance of the schools should also be incorporated. To meet the demands raised by the implementation of RTE 2009, it is fairly obvious that trainings will have to be decentralized. Further, they cannot be limited to face to face mode and alternatives such as teleconferences, group 44 discussions, distance mode and field interactions should be developed to provide an experience that is at par with in class training. The mechanical mode of conducting trainings on the same content on the same days for all the teachers at same time should be discarded. Training content should be announced well in advance and freedom should be given to the teachers to select and attend the training as per their needs. To overcome the shortage of good trainers, trainer's identification and

development program should be taken up. At state and District levels subject wise trainers should be developed. To promote work culture and professionalism in the teachers, selfappraisal mechanisms may be developed. Trainings should serve as grounds for teachers to refresh their knowledge and motivate them to take up diploma courses offered by institutes such as IGNOU. Efforts should be made to impart some form of training to private school teachers who have so far not been included in any initiative. While these recommendations have been listed separately for in-service and preservice programs, it should be understood that the two processes are not mutually executive.

Some recommendations at the structural level include: Strengthening of teacher education institutions in terms of physical, financial and human recourses. Addressing the problem of vacancies in the teacher education institutions by either utilizing experienced, inservice teachers or by out-sourcing. Development of lab schools to be run solely by teacher educators and no additional teacher to be appointed. To empower the teacher educators with a perspective building of their profession through regular classroom transaction in their lab School or attached school. Change in the recruitment policy of the teacher educators. Less emphasis on M.Ed. and providing multiple entry points into the system. For example, primary teachers or those who are having five years of primary school experience may be promoted to the DIETs, and the Upper primary/Secondary school experience teachers to CTEs and B. Ed colleges. Those who are appointed as direct recruits must undergo at least six months school experience program. In all teacher education institutions, Educational Resource Center can be established for the development of textbooks, materials, work books, self-45 learning material for the teachers and the children, for conducting researches and external evaluation programs, developing children literature, and magazines etc. Capacity building exercise of teacher educators every year should be mandatory. Study leave and sabbaticals may be granted as part of professional development programs. The teacher educators should be encouraged to conduct and publish a minimum of 2 action researches in an academic year. (SCF)-2011

Conclusion

Teachers at all levels of education should focus on imparting quality education. It is the prime duty of the teacher to bring optimum development among the students. Teachers' should show an equal level of dignity to his profession, institution, students, colleagues and parents. Teachers' should specially stress on developing the professional competency within them. Teachers should take the liability of teaching profession seriously and perform their duties efficiently. Therefore, for successful teaching, the necessary of professional learning and its implementation is very essential for teachers. Professional learning can ask a lot of teachers in the interest of their students. Even those who are confident in their professional role can feel profoundly uncomfortable when what they hold to be true is challenged and they have to rethink their beliefs and practices. This is particularly so because teachers are adults who have welldefined and defended schema about the way the world works. How should teachers be prepared in order to educate their students to address the most pressing issues of the future? That is by large-scale teacher professional

development programs that aimed at equipping students for the uncharted territory of a rapidly changing world.

Review of Literature

 Professional Development in Education in India: A View, January 2015. According to Selvaraj N*, Alagukanna AS and Suganya M

Education means reconstruction (or) reorganization of experience which adds to the meaning of experience and which increases ability to direct the course of subsequent experiences. The goal of education is to shape people so that they develop integral multi-facet personalities and is able to carry out fully their social role by developing their intellectual, physical and spiritual capacities and encouraging remove elevated level of human feeling and aesthetic taste, thus turning the ideological principle into personal connections and habits of behavior. Professors are groups of people with common goals who have attempted to institutionalize or systematize their patterns of behavior. All professions attempt to establish a standard of behavior which clearly evident to member and nonmember alike. As much as there are many professions, there is likely to be a wide variety of standards. Professional development training courses are not only applicable to people in business or management, but are also important for professionals such as teachers, technicians, nurses and engineers. Some of these professional courses are officially recognized and certify the candidates, on completion.

 In-service Teacher Training for Public Primary Schools in Rural India: August 2013 Huma Kidwai, Denise Burnette, Shreyanka Rao, Seema Nath, Monisha Bajaj and Nirupam Bajpai

Over the past two decades, India has made significant advances in school education in respect to overall literacy, access and enrolment in schools, and infrastructure. The two major accomplishments in the recent years is the political recognition of Universalization of Elementary education (UEE) as a legitimate demand and the state commitment towards UEE in the form of the Right of Children to Free and Compulsory Education. This has led to a higher demand of qualified elementary school teachers. Over the past decade, access to education was one of the only topics that were being addressed by the Government of India. However, increasingly the shortcomings of what actually takes place inside a classroom has come to the forefront of the national debate on education. Questions are being raised on whether the current cohort of teachers is being trained properly to meet the ever-increasing demands of being educators. Most of the discourse about in-service teacher training taking place in India has shown severe inadequacy where teachers feel incompetent to conduct their classes as the trainings provided are insufficient or ineffective or irrelevant.

3. Effective Teacher Professional Development May 2017, Linda Darling-Hammond, Mariya E Hyler, Madelyn Gardener.

Teacher professional learning is of increasing interest as one way to support the increasingly complex skills students need to succeed in the 21st century. However, many teacher professional development initiatives appear ineffective in supporting changes in teacher practices and student learning. To identify the features of effective professional development, this paper reviews 35 methodologically rigorous studies that have demonstrated a positive link between teacher professional development, teaching practices, and student outcomes. It identifies features of these approaches and offers descriptions of these models to inform those seeking to understand how to foster successful strategies.

4. Teacher Professional Development: International Perspectives and Approaches November 2015, Alfredo BAUTISTA & Rosario ORTEGA-RUIZ Nations around the world are currently

embarked in deep reforms of their education systems. There is widespread agreement among policymakers, scholars, and educators that one of the keys for success during these reforms is promoting the professional development (PD) of in-service teachers. Every year, governments invest astronomical amounts of money on teacher continuous learning. However, the literature shows that much of the PD offered to teachers is inefficient, having small or no effect on teaching practices and/or student learning. This monograph describes the perspectives and approaches to teacher PD of five nations heavily committed to research and/or practice in this field. Understanding how PD is structured in these nations may guide others in designing more favorable learning opportunities for their teachers. The article from United States provides a general framework regarding the features of high quality PD and offers examples of recent effective initiatives. The four following articles describe the PD models of Australia, Hong Kong, Finland, and Singapore, among the highest-achievers in education presently.

Because teacher continuous learning is a high priority in these nations, strong infrastructures for high-quality PD have been built to meet teachers' needs and interests. The monograph closes with a contribution from Spain, the country where the journal Psychology, Society and Education is edited. The author discusses the five prior articles and reflects on how the ideas presented could improve the PD currently offered to teachers in other nations, particularly Spain.

5. The Impact of Teacher-Lead Professional Development Programs on the Self-Efficacy of Veteran Teachers December 2016 Seth Powers, Ted Kaniuka, Brian Phillips, and Beverlyn Cain

This study examined the impact of a teacher-lead professional development program based on the Instructional Talk-Through (ITT) model, created to address the unique needs of high performing veteran teachers. Focusing on the professional development of veteran teachers is not a regular occurrence in schools and it is our opinion that these teachers possess a wealth of knowledge that heretofore has not been utilized to improve their overall skill set. The program was designed to capitalize on peer coaching, professional learning communities, classroom observation, and experiential knowledge while incorporating the unique strengths and abilities of these teachers in a collaborative environment.

References

- REPORT ON Status of Secondary Education in Telangana, Technology Readiness for CLIx Intervention in, Telangana CLIx in Telangana (May 2018).
- In-service Teacher Training for Public Primary Schools in Rural India (August 2013)

Professional Development in Education in India: A View (January 2015)

Half-yearly journal of educational research Indian educational review (July 2010)

"NISHTHA" National Initiative for School Heads' & Teachers' Holistic Advancement

- Importance of professional ethics for teachers Karma Sherpa, Ph.D. Research Scholar, Department of Education, Vinaya Bhavana, Visvabharati, Santiniketan, India. E-ISSN No : 2454-9916 | Volume : 4 | Issue : 3 | March 2018
- Teacher's in-service professional development needs assessment-the pakistani context Aamna Pasha, Yuling-Liu Smith, Shehzad Jeeva, J. S. Asian Stud. 07 (01) 2019. 01-08 DOI: 10.33687/jsas.007.01.2820
- What is happening inside classrooms in Indian secondary schools? A Time on Task Study in Madhya Pradesh and Tamil Nadu, ©2016 The International Bank for Reconstruction and Development/The World Bank 1818 H Street, NW Washington, D.C. 20433 USA.
- MOOCs for Teacher Professional Development: Reflections, and Suggested Actions Pradeep Kumar Misra, Chaudhary Charan Singh University (India), Open Praxis, vol. 10 issue 1, January-March 2018, pp. 67-77 (ISSN 2304-070X)
- Teacher professional learning communities: A collaborative OER adoption approach in Karnataka, India (Advance online publication), Kasinathan, G. & Ranganathan, S. (2017).
Professional Learning Needs and Development in Teachers in Telangana State: A View

- Exploring the current context for Professional Learning Networks, the conditions for their success, and research needs moving forwards [version 2; peer review: 5 approved], 05 Apr 2019, 1:1 (https://doi.org/10.12688/emeraldopenres.12904.2)
- Building Teacher Capacity at the Telangana Social Welfare Residential Educational Institution Society, Tanya Kant, Aditi Nangia, Usha Nikita Satish and Aarya Shinde, March 2020 DOI: 10.1007/978-981-15-2137-9_5 In book: Empowering Teachers to Build a Better World (pp.87-102)
- Avenues for Professional Development: Faculty Perspectives from an Indian Medical School September 2014, Kathmandu University Medical Journal 10(40): 60-5, Source PubMed, Project: Professional development.
- The Professional Development of Teachers, Creating Effective Teaching and Learning Environments: First Results from TALIS ISBN 978-92-64-05605-347 © OECD 2009.

ISSN 0975-0797 Journal of Education & Pedagogy (A Peer Reviewed/Refereed International Research Journal) Volume XIV, No.2, Dec. 2022, pp. 69-75

A Study of Male and Female Students of Secondary Schools in terms of Level of Aspiration

Harendra Singh*

ABSTRACT

The present study related to male and female students of secondary schools in terms of their level of aspiration. The objectives of this study were (i) to compare the level of aspiration of male and female students of secondary schools, (ii) to compare the goal discrepancy of male and female students of secondary schools, and (iii) to compare the attainment discrepancy of male and female students of secondary schools. The hypotheses were (i) there is no significant difference between male and female students of secondary schools at the level of aspiration, (ii) there is no significant difference between male and female students of secondary schools at the goal discrepancy dimension of the level of aspiration, and (iii)) there is no significant difference between male and female students of secondary schools at the attainment discrepancy dimension of the level of aspiration. For this study, 100 students were selected as a sample from the students of secondary schools situated in Meerut region. For the data collection, the Test for Measurement of Level of Aspiration developed by Dr. M.A. Shah and Dr. Mahesh Bhargava was used. The researcher finds a more similar level of aspiration between male and female students of secondary schools. The goal discrepancy dimension and attainment discrepancy dimension of the level of aspiration were found similar between them. Key words: Aspiration, goal discrepancy, attainment discrepancy, LOA.

Introduction

Secondary education constitutes an important stage of education. Secondary education should aim at self-expression, good human relations, and increases in social efficiency and civic responsibility. Secondary education begins to expose students to the differentiated roles of science, the humanities, and social sciences. This is also an appropriate state to provide children with opportunities to understand their constitutional duties and rights as citizens.

Aspirations can arguably help students improve their achievement, but they will be much more influential if they are accompanied by high expectations as well. However, these aspirations if supported by high achievement can erode the importance of expectations for predicting future educational behaviour.

* Professor of Education & Principal Director, D.P.M. (P.G.) Institute of Education, Behsuma, Ch. Charan Singh University, Meerut, Email: harendra_2k@yahoo.com

A Study of Male and Female Students of Secondary Schools in terms of Level of Aspiration

Level of aspiration is the estimation of an individual's ability for his future performance on the strength of his past experience his ability and capacity, the efforts that he can make towards attaining the goal are consequences of his past experience, whether the failureoriented or success-oriented level of efforts made by him in that direction and his capacity to pursue the goal.

Education is a process and kind of activity in relation to human beings. It is a continuous effort to develop all capacities of the students to control their neighboring environment and fulfill their needs. Though education is a part of human life, it cannot help the pursuers unless they have the required amount of Educational Aspirations. Individuals will have aspirations in all stages of life so that people try for their self-enhancement. So, in this process, many psychological aspects affect the individual aspiration. While having an educational aspiration students can feel internal fear towards reaching that goal of their educational aspirations.

Hoppe (1930) was the first psychologist who makes out the first experimental analysis of the situation involving aspiration level. He conceived the level of aspiration as a technique for studying dynamistic psychological factors, which separate the production of feelings of success and failure. He found that feelings of success and failure would be announced by discrepancies between aspirations and subsequent performance. He allows marked those individual differences in the level of aspiration in various experimental studies may be due to important personality differences. Frank (1935) in his study found sex differences in goal-setting behaviors. He found that scores of goal discrepancy of males are higher than females. Juckant (1937) in his study divided

500 subjects into three groups such as good, medium, and poor in school work, and found that a group of good students set an initial LOA rather than high in a scale between 7-10 in a scale of 1-10 and the poor students tended to set their LOA either high or low between 7-10 on other. He found increase in LOA with age. Anderson (1940) in his study of LOA on different age groups found that LOA increases with age. Rotter (1945) found that persons of high negative goal discrepancy have characteristic to avoid failure at any cost while persons of low negative and low positive goal discrepancy use an unrealistic solution of frustration which is an alternative method of handling or avoiding failure. Prakash, V. (1984) in his study found that sex and caste do not affect in rural and urban arias on the level of aspiration. He also found that the high-risktaking students differed significantly from lowrisk-taking students on levels of aspiration depicting high-rise-taking student to be more realistic.

Though the research in the area of creativity and level of aspiration is at the infant stage, it is also observed that studies on the level of aspiration are very few in number. It has been found that most of the studies show that male students are more creative than female students and male and female students are more similar in level of aspiration, though they were studied either independently or in combination with other variables.

Also, there is hardly any study to compare the level of aspiration of male and female students at the secondary level. Hence this investigation was undertaken to study the level of aspiration of male and female students of secondary schools.

Terms Used in the Study

Level of Aspiration: The LOA (Level of Aspiration) situation has been characterized by them as a choice situation in which the difficult, equally difficult, and less difficult levels were taken. The choice is determined by the valences (attractive or repulsive qualities of a situation) the choice of a particular goal region i.e. LOA is determined by the resultant force towards it. The person's expectancy of success and failure at a given level of performance defines the relative potency of the valences of success and failure. The LOA may be stated as the resolution of a conflict, which is influenced by 3 important factors (1) attractiveness of success, (2) repulsiveness of failure, and (3) cognitive factor of a probability judgment which implies expectancy of success and failure

Level of aspiration refers to where and how far individuals set their targets for achievement. It is a complex phenomenon and is determined largely by our past failures and successes, perceptions about our own ability, and some elements of involvement of our ego and self. In setting our level of aspiration whether it is high or low, what we attribute our failure or success to becomes a very important consideration. Failure or success may be attributed to ability, effort, mood, luck, knowledge, unfairness, the interest of others, etc. The level of aspiration can be understood by referring to Weiner's attribute. According to this theory, most of the attributed causes for successes can be characterized in terms of three dimensions: locus (location of the cause as internal or external to the person), stability (whether the cause stays the same or can change) and responsibility (whether the person can control the cause)

Statement of the Problem

The statement of the problem has been stated as A Study of Male and Female Students of Secondary Schools in terms of Level of Aspiration

Objectives of the Study

Every research work is written with some objectives, goals, or purpose. The present research study has also certain objectives as has been outlined below-

- 1. To compare the level of aspiration of male and female students of secondary schools.
- 2. To compare the goal discrepancy of male and female students of secondary schools.
- 3. To compare the attainment discrepancy of male and female students of secondary schools.

Hypotheses of the Study

To achieve the objectives the following non-directional hypotheses were formulated for the present research-

- 1. There is no significant difference between male and female students of secondary schools at the level of aspiration.
- 2. There is no significant difference between male and female students of secondary schools at the goal discrepancy dimension of the level of aspiration.
- 3. There is no significant difference between male and female students of secondary schools at the attainment discrepancy dimension of the level of aspiration.

Delimitations of the Study

The study was delimited to the psychological factors as Level of Aspiration

A Study of Male and Female Students of Secondary Schools in terms of Level of Aspiration

of 50 male and 50 female students of secondary school students studying in class IX of the Meerut district public schools.

Research Method Used in the Study

The study was interested to know the present status of the creativity of male and female students. Therefore, the survey method of the research was used by the researcher in the study.

Population of the Study

The subjects who participated in the study were chosen from the class IX students of the Meerut District. The population was of students studying in class IX, which is affiliated with CBSE New Delhi in the western area of Uttar Pradesh. Sample of the Study In the present study 50 Male and 50 Female students were selected for the sample studying in the secondary schools in are Meerut district.

Sampling Technique Used in the Study

A simple random sampling method was applied in selecting the sample of the study. The sample was done on two groups of students i.e., male students and female students of IX class. Both groups were selected randomly.

Tool Used in the study

The tool used in the present study is the Test for Measurement of Level of Aspiration. It is developed by Dr. M.A. Shah and Dr. Mahesh Bhargava.

Statistical Techniques Used in the Study

For the present study, the Mean, Standard deviation, t-test, etc. statistical techniques were used for the analysis of data.

Analysis and Interpretation of Data

 Table-1: Comparison of the Level of Aspiration of Male and Female Students of

 Secondary Schools

Groups	Ν	Μ	SD	't' Value	Level of Significance
Male Students	50	3.58	1.28	1.53	Not Significant
Female Students	50	3.98	1.36		

df = 98, (Table Value: .05= 1.98 and .01= 2.63)

Interpretation & Discussion: Table 1, shows that obtained 't' value of 1.53 is insignificant even at a .05 level of confidence for df. of 98. The minimum required significant 't' value is 1.98 at a .05 level of confidence. Obtained 't' value is less than that. It means

two groups namely male students of secondary schools and female students of secondary schools do not differ significantly in their level of aspiration scores. The observed difference in the mean scores of the two groups is not a real one. It is due to sampling error.

 Table-2: Comparison of the Level of Aspiration of Male and Female Students of

 Secondary Schools in Terms of Goal Discrepancy

Groups	Ν	Μ	SD	't' Value	Level of Significance
Male Students	50	2.18	1.49	0.35 N	Not Significant
Female Students	50	2.08	1.45		Not Significant

df = 98, (Table Value: .05= 1.98 and .01= 2.63)

Interpretation & Discussion: Table 2, shows that obtained 't' value of 0.35 is insignificant even at a .05 level of confidence for df. of 98. The minimum required significant 't' value is 1.98 at a .05 level of confidence. Obtained 't' value is less than. It means two groups namely male students of secondary

schools and female students of secondary schools do not differ significantly on their scores of the level of aspiration in terms of goal Discrepancy. The observed difference in the mean scores of the two groups is not a real one. It is due to sampling error.

 Table-3: Comparison of the Level of Aspiration of Male and Female Students of

 Secondary Schools in Terms of Attainment Discrepancy

Groups	Ν	Μ	SD	't' Value	Level of Significance
Male Students	50	1.90	1.17	0.69	Not Significant
Female Students	50	2.06	1.19		

df = 98, (Table Value: .05= 1.98 and .01= 2.63)

Interpretation & Discussion: Table 3, shows that obtained 't' value of 0.69 is insignificant even at a .05 level of confidence for df. of 98. The minimum required significant 't' value is 1.98 at a .05 level of confidence. Obtained 't' value is less than that. It means two groups namely male students of secondary schools and female students of secondary schools do not differ significantly on their scores of the level of aspiration in terms of attainment discrepancy. The observed difference in the mean scores of the two groups is not a real one. It is due to sampling error.

Validation of Hypotheses

Hypothesis No. 1- States that, there is no significant difference between the Level of Aspiration of Male and Female Students of Secondary Schools. The obtained 't' value regarding hypothesis No. 1 is 0.19, which is insignificant at both levels of significance. It indicates that male and female students studying in secondary schools do not differ significantly in their level of aspiration. Thus hypothesis No. 1 is accepted.

Hypothesis No. 2- States that, there is no significant difference between the Goal Discrepancy of Male and Female Students of Secondary Schools. The obtained 't' value A Study of Male and Female Students of Secondary Schools in terms of Level of Aspiration

regarding hypothesis No. 2 is 0.19, which is insignificant at both levels of significance. It indicates that male and female students studying in secondary schools do not differ significantly in their level of aspiration in terms of goal discrepancy. Thus hypothesis No. 2 is accepted.

Hypothesis No. 3- States that, there is no significant difference between the Attainment Discrepancy of Male and Female Students of Secondary Schools. The obtained 't' value regarding hypothesis No. 3 is 0.59, which is insignificant at both level of significance. It indicates that male and female students studying in secondary schools do not differ significantly in their level of aspiration in terms of attainment discrepancy. Thus hypothesis No. 3 is accepted.

Conclusions

On the basis of the findings following conclusions have been drawn-

- 1. Male and female students studying in secondary schools were more similar in level of aspiration.
- 2. Goal discrepancy, a dimension of the level of aspiration of male students is similar to female students studying in secondary schools.
- 3. Male students and female students studying in secondary schools were more similar in attainment discrepancy, a dimension of creativity.

References

- Agarwal, A. (2002) Study of Relationship of Academic Achievements of Boys and Girls with Self-Concept and Level of Aspiration, Indian Journal of Educational Research, Vol. 21, pp.75-76
- Buch, M.B. (Ed.) (1974), 'First Survey of Research in Education', NCERT, New Delhi
- Buch, M.B. (Ed.) (1988): 'Fourth Survey of Research in Education', NCERT, New Delhi, Vol-Ist and IInd .
- Buch, M.B. (Ed.) (1993): 'Fifth Survey of Research in Education', NCERT, New Delhi, Vol-Ist and IInd
- Bhargava, V.P., (1972) "A study of level of aspiration and need for achievement." Ph.D, Psychology. Agra Uni. Buch Ist survey, 172.
- Dave, Nidhi, (1991) "A study of the effect of level of aspiration, prolonged deprivation and educational achievement on the awareness of youth towards population problem." Ph.D Edu. Agra University. Buch Vth Survey, Vol.2, 1739.
- Sharon (1987) The level of aspiration of white and Neqro Children in relation to self-esteem and Social Status. Journal Social Psychology, 36, 191-196.
- Prakash, V., (1984) A Study of the factors affecting Level of Aspiration. Ph.D Edu. Kurukshetra University. Buch IVth survey, vol. 1, 414.
- Mathur T.B.(1970) "Causes of Frustration in Adolescent and its Relation with the Level of Aspiration". Ph.D, Edu. Agra Uni. Buch Ist survey, 158.

Journal of Education & Pedagogy

- Jasuja, S.K.,(1983) "A study of frustration, level of aspiration and academic achievement in relation to age, educational and sex to differences among adolescents". Ph.D Psy., Agra Uni. Buch IIIrd survey, 828.
- Jain, Ganeshlal, (1990) "A comparative study of values, level of aspiration and personality traits of rural and urban adolescent girls of Rajasthan". Ph.D Edu., MLS. Uni.. Buch Vth survey, vol.2, 1706.

ISSN 0975-0797



JOURNAL OF EDUCATION & PEDAGOGY

(A Peer Reviewed Refereed International Research Journal) Published Biannually

By National Educationist Council

CALL FOR PAPERS

The Journal of Education & Pedagogy is addressed to the international readers, researchers & educationists, published twice a year in June and December, by the National Educationist Council.

It invites unpublished and original research papers, book reviews, Ph.D. thesis reviews, summaries and reports etc.

*Short communication to review articles, reports of conference, summary or views on government reports, debatable issues, etc. are also published.

*Authors/Publishers are also welcome to send books or book review to the Editor for the publication of review in the journal.

GUIDELINES FOR CONTRIBUTORS

- 1. Electronic copy must be sent to the Email: jepnec@gmail.com and copy forwarded to harendra_2k@yhahoo.com. Article/paper must be in MS-Word document in Times New Roman in font size 11 (Paper in other format will not be accepted)
- 2. Papers/articles should be original & unpublished contribution. Papers should be accompanied by a declaration that the material is original, has not been published elsewhere in part or full and the same has not been submitted for publication in any other book or journal or elsewhere. Submission of research papers/articles will be held to imply that it has not been previously published and is not under consideration for publication elsewhere and further that if accepted, it will not be published elsewhere.
- 3. Email of the research paper/article should be submitted along with an abstract not more than 200 words. The length of a paper including tables, diagrams, illustration etc. should be between 3000 to 5000 words, along with author's brief resume, contributor must be subscribe the journal. A copy of the journal will be sent to the contributor by ordinary post, if he/she subscribes journal.
- 4. Editorial board has all rights for publication/making any alteration/change in the paper/ article or refusal. No correspondence will be entertained regarding the publication of articles/papers. Refused articles/papers will not returned. Editorial board has rights to publish research papers/articles etc. in any of the journals published by NEC or its collaborative publication.
- 5. Paper received from 1st July to 31st December will be considered for June volume and from 1 January to 30 June will be considered for December Volume of the Journal.

- 6. The paper once submitted to this journal should not be resubmitted simultaneously to other journals of else where for consideration.
- 7. All papers submitted to the journal will be the property of National Educationist Council and subject to blind review. To ensure anonymity, the author's name, designation, affiliation, official & residential address and other details about author should only appear on the first page along with the title of the paper. Second page should start with the title of paper again followed by text.
- 8. Footnotes in the text should be numbered consecutively in plain Arabic superscripts. All the footnotes, if any, should be typed under the heading 'References' at the end of the paper immediately after 'Conclusion'.
- 9. For citation of books the author's name should be followed by the (b) title of the book (c) year of publication or edition or both (d) page number (e) name of publishers and place of publication.
- 10. All references should be alphabetically arranged at the end of the text. Style should follow: author's name, forename/initials, date of publication (italicized in case of a book, and in double quotations in case of an article, and the source, Journal or book underlined or italicized), place of publication, publisher, page numbers, and any other additional information. Journal articles should contain complete information regarding volume number, issue number, date, etc. A few examples are as follows:
- * Malik, A.P. (1998) Education Policy and Perspective. New Delhi: Allied.
- Majumdar, Ramesh (1997) "The Role of the Society", Journal of Educational Views, 1 (3 & 4), July-October, pp. 1-11.
- * Ganeshan, P.R. (1989) "Educational Finances in a Federal Government", Seminar on Mobilisation of Additional Resources for Education. New Delhi: National Institute of Economic Planning (mimeo).
- **Note:** Note: Note: Kindly send your paper for publication in the journal as following format- Topic of the research paper, abstract, key-words, Introduction discussing problem, the paper focuses and its theoretical background, Statement of the Problem, Objectives of the Research Paper, Hypothesis, if any, Population, Sample, Tools used in data collection, Process of data collection, Findings and References. No Need to write above sub-headings of the paper but the paper should contain description related to them. All Correspondence should be Email to: jepnec@gmail.com and copy forwarded to harendra_2k@yahoo.com.

JOURNAL OF EDUCATION & PEDAGOGY

(A Peer Reviewed Refereed International Research Journal) Published Biannually in June & December every year

SUBSCRIP	PTION FEF
With in India	Out Side India / Abroad
One year Rs. 1500/-	\$ 350
* Subscription amount should be submitted	l in the bank account:
The account detail:	
UNION BANK OF INDIA, Meerut (Ma	ain) Branch, Meerut-250001 (U.P.) India,
A/C No. 306001010035323, IFSC Code:	UBIN0530603,
the subscription form along with dep	posit slip should be send through Email to
jepnec@gmail.com & copy to harendra	_2k@yahoo.com
Format for Subsci	ription Application
I, Prof/Dr./Mr./Mrs./Ms.	wish to
subscribe the "Journal of Education & Pedagogy	"for the year
of journal subscription is deposited in the h	ank account through the transaction number
dated of Rs	Kindly send the journal at the following
address (should be in Block Latters)	Kindry send the journar at the following
address (should be in block Letters).	
Details of Subscriber:	
Name: Desi	ignation
Official Address:	
·····	
Phone &	Mobile:
Email:	
	Signature
Residential Address:	
Phone/Mabile	

Note: Journal will be deliver through ordinary post, if you want through registered post or courier it is necessary to paid appropriate additional charge for postage according postal rules alongwith self addressed envelop (Postal delay or lost or damage of journal is not the responsibility of the National Educationist Council.

