FIRST EDITION

OPTIMAL TEACHING PRACTICES

Addressing Learners Educational Approaches and Contextual Factors

Sanskriti University, Mathura, U.P. India

Dr. Sachin Gupta,
Dr. Meenakshi Sharma,
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Dr. Mahamud Khan

Addition Publishing House

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Preface

In the dynamic and diverse field of education, optimizing teaching practices is essential for fostering effective learning environments and achieving educational success. "Optimal Teaching Practices: Addressing Learners, Educational Approaches, and Contextual Factors" provides an in-depth exploration of the strategies and methods that contribute to effective teaching and enhanced student outcomes.

This book begins by examining the foundational elements of optimal teaching practices, focusing on how educators can address the diverse needs of learners. We delve into various educational approaches and theories, including differentiated instruction, formative assessment, and student-centered learning. By understanding these principles, educators can better tailor their teaching methods to meet the varied needs and learning styles of their students.

The core sections of the book are dedicated to exploring practical strategies for implementing effective teaching practices. We discuss techniques for engaging students, fostering critical thinking, and creating inclusive and supportive learning environments.

As you explore this guide, we encourage you to reflect on how the strategies and practices outlined can be tailored to your unique educational context, enhancing your teaching effectiveness and fostering a positive learning environment for all students.

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CONTENTS

1. Test Anxiety among Upper Primary and Secondary Level Students: A Comparative Study

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Abstract

In this era, explosion of population and changing dimensions have brought a rapid change in socio- economic scenario of human life. The mutual relationship, principles of co-existence and tolerance have got a major setback in the days. These short-coming infused isolations, helplessness and feeling of insecurity, direct or indirect lack of reliable warmth, overprotection, lack of real guidance, disapproving attitude, injustice, discrimination, un-kept promise and so on so forth. These situations threaten as well as produce pain and increase tension and conflict. At the extreme of these situations person's ego turns out of control: the ego becomes flooded with anxiety resulting in distorted personality of an individual. Due to high competition and material-based lifestyle in modern days mostof people suffer from anxiety and frustration. This paper assesses and compares the level of test anxiety among upper primary and secondary level students. It was found that approx. 50% of the sample have average level of test anxiety. Nearly ¼ have high level and rest of the students have low level of test anxiety.

Keyword: Test anxiety, stress, school environment

Introduction:

Anxiety has been defined as a vague, uncomfortable feeling exacerbated by prolonged stress and the presence of multiple stressors (Lazarus &Folkman,1984). Generally speaking, anxiety occurs when a reaction is out of proportion with what might be normally expected in a situation (Dobson, C. 2012). Anxiety is a normal reaction to any perceived threat or concern. If we believe something important to us is in danger or being threatened, we may over-estimate the threat and underestimate our ability to cope with it. It is a normal reaction of apprehension, tension, or uneasiness to any perceived threat or anticipation of danger (Chauhan, S.S, 2010; Sarason, I. G. 1978). A low level of stress is necessary, but it is sometimes so complicated that limits individual performances in test and leads to a behavioural disorder or low confidence or poor academic performance. Individuals sometimes hatestudying just because of the evaluation

and sitting a test (Moadeli, Ghazanfari, 2005). Due to throatcut competition in school education, test anxiety is prevalent among students than a few years ago.Students of all academic achievement levels suffer from academic anxiety. Even students who do wellon class work and homework can suffer from test anxiety and do poorly on tests (Bensoussan, 2012). Test anxiety refers to the appraisal of a test or other evaluative situation as threatening and consists ofdistinct cognitive, affective physiological and behavioral components (Zeidner& Mathews, 2005).Spielberg and Sarason define test anxiety as a situation-specific trait that refers to anxiety states experienced during examinations. This is a complex and multidimensional construct, embodyingdistinct individual perceptions, and physiological and behavioral responses. (Cited by Zhang andHenderson 2014). Test anxious pupils have difficulty concentrating in test, and in reading andunderstanding test instructions and questions; they become easily distracted, and experience problemsin recalling learnt material. (King, Ollendick&Gullone, 1998 cited by Dutta and Dasgupta 2013). Thecognitive dimension of test anxiety emerges in the literature as the most consequential component withregard to test performance. Test anxiety increases due to: Insufficient exam preparation, Worryingabout past performance, Disturbing about your performance in comparison to your peers, Striving for perfection, Thinking about expectations of others, Focusing exclusively on the marks, Assuming youwill not perform well, Focusing on the consequences if you are unsuccessful, Stimulant use: caffeine,nicotine, drugs, alcohol, etc. Study has been reported that the main sources of stress and anxiety forhigh school students includes school related situations such as tests, grades, studying and self-imposedneed to succeed (Kouzma and Kennedy, 2004).

Hong and Karstensson, (2002) believe that high level of anxiety creates intrusive thoughts which doesn't associate with the test and don't let them concentrate on the test. All these cut and off thoughts cause failure in learning. Singh, S. & Thukral, P. (2009) reported a Significant differences were also observed between boys and girls, rural and urban students on the basis of their anxiety. Annayat, R. and Tina (2014) found that there exists significant difference in academic anxiety of adolescent boys and girls, there exists significant difference in academic anxiety of adolescent boys and girls having literary, scientific, persuasive, commercial, constructive, and artistic as area of vocational interest.

Based on review of the above literatures and from personal experience, the investigator came to know that most of the students experienced anxiety before the examination. The various researchers had attempted to study the test anxiety of students in High school, College, Medical , Engineering, Nursingetc. but there is dearth of studies on upper primary and secondary level students.

Objectives of the study:

1.To assess the level of test anxiety among upper primary and secondary level students.2.To

compare the test anxiety among upper primary and secondary level students
3.To compare the test anxiety among upper primary and secondary level students with respect to theirgender.

Hypotheses of the study:

Following null hypotheses are framed and level of significance is taken as 0.05.
Ho1: There is no significant difference in the test anxiety among upper primary and secondary levelstudents.
Ho2 : There is no significant difference in the test anxiety of boys and girls at upper primary
Ho3 : There is no significant difference in the test anxiety in boys and girls of secondary level.

Methodology

Keeping in mind, the nature of the present research problem descriptive survey method was found to be the most suitable for this study and hence it was employed. Population of the present study comprised all the upper primary and secondary students enrolled in CBSE affiliated schools of Varanasi city. Through Purposive sampling techniquefirstly schools and then students studying in them were selected. Total 200 students, 50 boys and 50 girls of each level i.e. upper primary (class 6- 8) and secondary (9^{th} and 10^{th} standard) were withdrawn from the population. "Test Anxiety Scale" Aself-developed tool was used to know the test anxiety level among students. This tool consisted of 55 items, which covers different dimensions of test anxiety like physiological, emotional, behaviouraland cognitive. Each item has two response categories viz. Yes and No. The reliability of the test was found to be 0.81 by split-half method. The content and face validity of the test were also established.

Result and Discussion:

In order to verify the stated hypotheses, data were analyzed with the help of Mean, S.D, t-test with the help of SPSS package. The level of confidence was fixed at 0.05 for testing the hypothesis. The resultshave been reported, interpreted and discussed objective-wise.

Level of test anxiety among upper primary and secondary level students: To determine the patternof distribution of students into different scales of test anxiety, the scores obtained from upper primary and secondary level students are matched with the established Test Anxiety Scale (TAS) Norms for different levels of anxiety. Accordingly based on each student's test anxiety level, the students are categorized as lower, average and higher. The TAS for upper primary and Secondary students were different. Upper primary students' whose scores are less than 12 are categorized as lower test anxiety. Whereas students' scores above 24 falls in higher anxiety category and those students whose test anxiety score is between 12- 24 are declared as having average test anxiety. Similarly, in the case of Secondary students, scoring below 15 is lower test anxiety, ranging from 15- 26 is average test anxietywhile above 26 is considered as having

higher test anxiety. Based on the TAS, upper primary and secondary level students under observation were categorized as belonging to different test anxiety levels. Table:1 summarizes the number and percentage of upper primary and secondary students falling into the different categories of test anxiety levels. Observing the above table it is clear that thereis much similarity in the test anxiety levels of upper primary and secondary level students. The numberand percentage of students falling within the Average Test Anxiety scale are equal in both levels.

Table 1 Test anxiety level among students

However the number and percentage of students in the Lower Test Anxiety is higher among upper primary students as compared to secondary level students, although this difference gap is only around 1%.In contrast the percentage of students in the Higher Test Anxiety scale is 1% more in Secondary level students than those in the upper primary level. These results reveal that nearly half the sample of student under present study, experienced Average Test Anxiety. They may worry slightly and may
experience some form of behavioural or emotional problems but they are able to easily handle and manage them. This level of anxiety is considered not to be very harmful and may sometime proof to begood for students to encourage them to perform better in their test.The remaining half of the sample ofstudents, are distributed nearly equally into the other two categories i.e. Lower Test Anxiety and Higher Test Anxiety. Thus approximately 25% of the sample of students in both levels experienced higher test anxiety. Before the examination, they experienced rising anxiety while during examination they felt either too hot or too cold. They also had Headaches, stomach upsets, or nausea during or few days before the examination or test. They also suffered behavioural irregularities like restlessness, dizziness, recurrent urination, frequent thirst, besides excessive or very less sleep and hunger.
They were traumatized by thoughts of failure or being unsuccessful, became very fearful and behaved unpredictably displaying anger or depression or worry or feeling very relaxed before their testor examination. A loss of confidence and memory and the mind becoming blank during the test was common. They forgot what they had learned, found difficulty in recalling the learned materials and in organizing their ideas or thoughts. They lost their attention and concentration. All of these affect their achievement adversely. From the above table it is cleared that approximate $1/4^{th}$ students having lowerlevel test anxiety. It was conveyed that these students remained relaxed and carefree during and beforetheir examinations or tests. They experienced very little behavioural and emotional trauma. In fact they enjoyed their daily routine or sometimes had fun during examinations days. Such type of attitude towards examination may also affect the performance.

2.Comparison of Test anxiety between upper primary and secondary level students: For objective-2 to compare the text anxiety level between upper primary and secondary students t-value has been calculated and represented in following table. Table: 2 reveals that the calculated value of t for df 198 is $t_{0.05}$ =1.270 and p value is 0.206 which is less than tabulated value at 0.05. This p value is not significant at 0.05 levels of significance, for the degree of freedom 198. Hence the null hypothesis 1 "That there is no significant difference in test anxiety among upper primary and secondary level students." was accepted.

Table:2

t- test analysis for test anxiety between upper primary and secondary students

The result indicated that in the present study there were no significant differences in test anxiety of upper primary and secondary students. It means that the level of test anxiety is almost equal in these two levels of students, that is, the students of whether, upper primary or secondary level, experiences approximately the same level of anxiety.

The finding of the present study is supported by the study of Cheraghian, et al., (2008). They reported no significant relationship between test anxiety, age, and the level of education. This result however is contradictory to the findings of Nejad, et al., (2011) and Prabhudeva (2007), both of whom , suggested that students studying in lower degrees are more anxious than those who are more familiar with the test taking process in the academic environment. In another study, Lawal, A. M. Idemudia, and Adewale, (2017) investigated the effects of academic self-confidence on test anxiety indicators - performance impairment and intrusive worry. They found that first year students reported higher intrusive worry than those in second, third, or fourth year of study. Similarly, in the present study it has been reported that students in upper primary level are experiencing slightly greater test anxiety in comparison to secondary level students.

1. **Comparison of Test anxiety among upper primary and secondary level students with respectto their gender.**

a. To examine the objective -3, which aim to determine the test anxiety among different levels ofstudents in relation to their respective gender, t- test has been calculated separately for upper primary and secondary levels as shown in following table. It has been revealed in the above table that the calculated value of t for df = 98 is $t_{0.05}$ = 3.320 and p value is .001 < 0.05. This shows that p computed value is at 0.05 levels of significance for the degree of freedom 98.

Table:3

T- test analysis for test anxiety between Female and Male upper primary students

Hence the null hypothesis 2, that "there is no significant difference in the test anxiety in male and female students of upper primary level" was not accepted. The result indicated that in the present study there exists a significant difference in test anxiety of male and female students of upper primary level. The higher mean score of females in comparison to male reveals that girls' students of upper primary classrooms are experiencing more test anxiety than their counterparts. These may be due to factors related to gender bias of school, society and parents. In upper primary stage, girls are maturing towards puberty. Many stereotypes in our society, associated with girls, about their education have adverse effect on their personality. Girls are psychologically struggling for their acceptance in home, society and school which has a negative impact on their self- esteem and hence this may be a possible reason for higher test anxiety experienced by these students. This finding is supported by the findings of Gurse, et. al., (2010) and Mohammad et al., (2012). They also reported that the impact of anxiety is more on female students as compared to male students. Annayat and Tina (2014) conducted a study to evaluate the academic anxiety of adolescents in relationto their vocational and educational interest. They found that there exists significant difference in academic anxiety of adolescent boys and girls having commerce, home science, and humanities as area of educational interest. Both these studies also concluded that the impact of anxiety on female students was higher as compared to male students.

To determine the test anxiety level of secondary level students with respect to their gender:

For this t-test was carried out and the results are presented below in Table: 4. It has been observed from the above table that that calculated value of t for df = 98 is $t_{0.05}$ = 0.650 and p value is 0.517 >

0.05. This shows that p computed value is not significant at 0.05 levels of significance for the degree of freedom 98. Hence the null hypothesis "There is no significant difference in the test anxiety in maleand female students of secondary level" was accepted. The result indicated that in the present study there exists no significant difference in test anxiety of male and female students of secondary level.

Table:4

t- test analysis for test anxiety between male and female secondary students

Although, t value is not significant but the higher mean score of female in comparison to male studentsreveals that girls' students of secondary classrooms are experiencing the greater test anxiety. The findings of the present study is not in agreement with the results of Zeidner, (1990) and Singh, and Thukral, P. (2009) who reported in their studies that significant differences exists in thetext anxiety scores for males and females students.

Conclusions:

In a nutshell, it emerges from this study that upper primary as well as secondary level students showednormal distribution pattern of test anxiety and not much significant difference exist between both groups. It had also been concluded that approximately half of the sample of students, in both cases hadhigher (28-29%) and low level (23-24%) of test anxiety which may adversely affect their cognitive functions and hinder healthy mental development. The study reported that approximately 25% studentsin both cases fall under the category of high level of test anxiety which need more concerns and attention. Severe anxiety disorders leads to cognitive distortions, dysfunctional schema, psychosomatic complaints, headaches, stomach ache, fainting etc. Educational psychology literature reports that consequences of severe anxiety include cautious or rigid thinking, limited responsiveness, interferencewith cognitive processes, diminution of complex intellectual processing and problem solving, heightened susceptibility to persuasion, higher likelihood of imitating models and increased attentionto oneself rather than to the environment.

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2. Indigenous Education: An Early Colonial Experience

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Abstract

indigenous people's lives and cultures, that had put indigenous culture as the foundation of learning and growing as a person.British colonizers classified the existing Indian educational system as indigenous education and undermined them when they introduced western education and their colonialeducation policies. Macaulay's 'Minute upon Indian Education' was upheld colonial elitism and white racism. Macaulay stated "I have no knowledge of either Sanscrit or Arabic. But I have done what I could to form a correct estimate of their value. I have read translations of the most celebrated Arabic and Sanscrit works. I have conversed, both here and at home, with men distinguished by their proficiency in the Eastern tongues. I am quite ready to take the oriental learning at the valuation of the orientalists themselves. I have never found one among them who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia. The intrinsicsuperiority of the Western literature is indeed fully admitted by those members of the committee who support the oriental plan of education."

Keywords**:** *Cultural Wisdom, Community Bonds, Spiritual Traditions, Language Preservation, Land Stewardship*

Introduction: Though it is evident that the indigenous education system of pre-colonial India was considered unnecessary and redundant by the British colonial ruler, owing to itstraditional roots, the system, in reality, had great potential for flourishing into a universal system of education, regardless of its defects. A mass education, built upon the foundations of the traditional system and improved upon the existing royal patronages and native institutions of the country, it wouldbe interesting to gauge this pre-colonial indigenous education systemeffective to be a sustainable system of education.

There were two main sections of pre-colonial indigenous education i.e. primary education and higher education. Pathshalasand Maktubs were the centres of primary education, Tols and

Madrasaswere the centres of higher education. For primary and higher education both there were social-cultural, politico-economic, structural and pedagogical differences between pathshala and maktubs, andtolsandmadrasas.

From the 12th century onwards, we can trace references made to the functioning of pathshalas partaking educational activities in various indigenous pieces of literature. Raghunandan Goswami's "Ram Rasayan" and Lal Behari Dey's "Pathshala Darshan" contains elaborate information about pathshalasand how they run. In the 1830s, British East India Company in their quest for 'civilising the natives' gave charge to William Adam, a Scottish missionary, to tour the districts of Bengal and Bihar. He reported on the condition and progress of Indian education in the local schools. Adam found that the system of education in the local schools, known as pathshala, was quite flexible, as there were no fixed fees, no benches or chair, no system of separate classes, no annual examination. In some places classes were held under a banyan tree, in other places in the corner of a village's shop or temple, or at the teacher's residence. The mode of teaching was oral, teaching pedagogy arbitrary and teachers used to decide what to teach. William Adam's reports have passed us valuable information about pathshalas and chatuspathisin early modern India and he observed that the system was very popular and was increasing very rapidly as a mode of mass education. He also observed that every village of Bengal and Bihar had at least one pathshala.

Pathshala made its place either under the roof of a tree or in baithakkhana or chandimandap. There was no scheduled time for pathshala as it rolled for the whole day. The students use to come to pathshala in the early morning and noon there was a break for lunch at home and after playing in the evening they returned home. This education is verbal, the medium being vernacular. Monetary supportcame from the elite class, comprising of the monarchs, feudal lords, and landlords. During the early colonial period, the fees were one annato twoannas. Poor learners used to paygurudakshina, little gift either in cash or kind, as token donations to the teacher or the teacher's family. The salary of the teacher varied from three to five rupees. According to Adam's reports the holy chanting of different gods and goddesses, prayers associated with Gurudakshina, Saraswativandana, Gangavandana, Gayatri mantra etc.,were taught here. Stories of Puranas, VetalaPanchavimshati, and Panchatantra etc. andrecitation of Ramayanaand Mahabharatawere also important subjects of learning. There were no printed texts and even the use of handwritten pandulipis i.e. the manuscripts were quite limited. The teacher and the studentused to enjoy a very paternalistic relation, of that of a father and a son.

Poromesh Acharya, in his study of the character and extent of indigenous vernacular education prevailing in undivided Bengal, before the introduction of the British system of primary education, hasobserved that pathshala had remained an extra advantage for the common people as a medium of mass-education – without any external burden on them; it catered a suitable

education policy to them. In the context of the then-existing structure of rural society and the problems of participation by weaker sections of the rural community in that indigenous system, pathshalasoffered self-sufficient, autonomous seats of learning. The teachers for their livelihood were depended upon the students, so they were engaged inacquiring more students. The parents endorsed the pathshalas as they were considered noble and safe for their children and their moral upbringing. Thus,pathshala became tremendously popular among village people.

Pathshala also used to be a partially secular institution. Francis Buchanan-Hamilton, a Scottish polymath who served British East India Company from 1794 to 1822 and had remained in India for the next one decade, has observed that both the Hindu and Muslim students used to get their primary education from the pundits of pathshala. However, according to Adam, pathshala education had not overcome the religious and caste differentiation. Girls were detached from any kind of learning in pathshala yet it is interesting to note that in Sarat Chandra Chattopadhyay's famous novel"Devdas", one of the protagonists Parvati read in a pathshala, along with other girls and boys. – Nevertheless, till 18^{th} to 19^{th} century, the popularity of pathshalaas a mode of mass education has given much more thanthe expected outcome, though, with the introduction of the western education, the pathshala started to decay.

Another instrument of the primary education wasthe Maktubs that were aimed to teach Qur'an among the Muslimstudents. Interestingly, there was a dearth of information about Maktublearning in the education reports of Adam. Even other contemporary researchers also did not detail much about the Maktubs. To the common Muslim population, Maktub meanta school where children can learn 'how towrite?'. However, Qur'an, Arabic writing, arithmetic, grammar and literature also remained the main study materials. But in reality, the religious study and the Qur'an had been almost dominating. A Maktub was operated under the village mosque and the imamor the maulvi worked there as theteacher. However, we have a paucity of source material apart from the oral and folk literature to know the details of the study process in the Maktubs. Sir Abdur Rahim and Gazi ShamsurRahaman in their 'Islamic Theology' opined that religious teaching was the basic policy of primary education in Maktubs. According to Azizur Rahaman Mulllick "the teachers of maqtabs were partly literate and without any understanding Koran had been taught here". Therefore, due to the non-secular reasons andferocity of Islamic religious and spiritual inclinations, the maktubs never become popular among the general people. Thus, due to these limitations of maktubs system remained uninfluenced by the British Education policy. Moreover, the rural Muslim population lacked the zeal in acquiring knowledge of English as it was easy to shift from the study of Arabic and Persian to English by the Hindus; however, for the general Muslims, it was quite tough. It could have been easier for the general Hindus to switch from the study of one foreign language i.e. Arabic or Persian to another foreign language i.e. English, but for the general Muslims, it was sentimentally much

tougher to switch from the languageof their own to a foreign language.

If we compare between the teaching-learning potential of the pathshalas and maktubs, it can be said that pathshalas were not attached to any special place of worship whereas the maktubswere always attached to and centred around the mosque. The pundits or the gurus of the pathshalasenjoyedautonomy and interdependence with the student folks whereas the maktubs enjoyed the comprehensivereligious influence of the mosques. Hence the usefulness of the education imparted in the pathshalas was much more popular and effectivethanthat of the maktubs. That may be the reason that even after the advent of British colonial education policy, pathshalasremained the primary centres of education for the rural aristocrats, middle-class Government officials posted in the rural areas and common people, received government grants and inspections whereas the maktubs held its traditional character and gradually become out-dated and obsolete.

After the completion of the primary education, desiring students used to enter the tols to acquire highereducation. These tols were generally institution of Sanskrit learning and were exclusively meant for the education of the Brahmin students. However, with wealth and influence, the rich merchantsalso could occasionally have their sons enrolled and educated there. The various branches of the Sanskrit literature such as kavya i.e. poetry, vyakarana i.e. grammar, jyotisha i.e. astronomy, chhanda i.e. rhetoric, nirukta i.e. lexicon, and darshan i.e. schools of philosophy were offered as the curriculum of the tols. Though theology and philosophy formed an important cause in the tolseducation, there was also provision for the study of itihasha i.e. history and knowledge of vernaculars and Arabic and Persian were also taught imparted in some of the tols.A 17th-century Persian chronicle, Baharistan-i- Ghaibiauthored byMirza Nathan informs that the works of Kalidasa and the commentaries of Panini's Aṣṭādhyāyī grammar as well as the Ramayana and the Mahabharata along with different contemporary regional works of literature, especially the Mangal Kavyas and the Vaishnava Padavalis, werethe prescribed text-books in thetols.Furthermore, contemporary regional pieces of literature provide references to tols particularly dedicated to the study of the science of medicine wherevaidyas or kavirajs were devoted to the studydiverse medical works.

By the 18th century, Navadwip of Bengal became the centre of tol-chatuspathi learning with students coming from Kamrup (Assam and Arunachal Pradesh), Utkal (Odhisha), Mithila (Upper Bihar), Benaras (Eastern Uttar Pradesh), and Kashmir, to study Naya, Smritis, Dharmashastras, Astrology, Arithmetic, Grammar, Literature of Kalidasa, Hitopodesha etc. Even a century later Hunter Commission refers to Nabadwip as ‘Oxford’ of Bengal Presidency for enriched Sankrit knowledge base. Adam gives some references of tols being patronized by Rani Bhavani ofNatore and Raja Krishna Chandra of Nadia; and points out that Raja Krishna

Chandra gave a monthly stipend of two hundred rupees to everySanskritlearner at Nabadwiptols.In 1820, Lord Francis Rawdon Hastings observed 747 students and 31 Sanskrit institutions in Nadia.Adam also observes that tols started blooming in Sutanuti and Govindapur, and in Calcutta, there are 173 students in 28 Sanskrit schools and the number increased as money came from the nouveau riche of Calcutta, the new colonial hotspot. Most of these tols were situated in the 'Black Town' across the 'Maratha Ditch' i.e. the north Calcutta.MrityunjoyVidyalankar and AnandaramBagish and fifteen other pundits regulated the bigger tols of early colonial Calcutta. Moreover, according to government reports of 1820, 190 tolswere ushering in the 24 Parganas where newcomer village pundits werethe foremost stakeholders to establish, maintain and upgrade these tols giving a tough competition to that of the city.

The tol education was inexpensive and there was no class differentiation for the learners yet caste hierarchy and religious and sectarian differences were very much prominent. The teachers were generally Brahmins whereas the students, scholars and learners were mainly from different Kulin castes, mostly Brahmins and Kayasthas. Tol pundits and scholars used to attend various religious ceremonies and debates which increased their social power and authority. We also get references to women learners coming to the tols for education; Anandamoyee Devi of Bikrampur, Dacca and Baijayantee Devi of Kotalipara, Calcutta arerare but successful examples women who achieved higher education in the tols in the early colonial Bengal. Moreover, though we have scanty references to the library, Khardah's Babu Ramhari Biswas and Calcutta's Raja Nabakrishna premises were renowned fortheirpandulipi collection of several manuscripts on diverse subjects. However, tols did not offer any technical education and in the 19th century thus lost its prime position due to the amalgamation of technical education in the curriculums offered under Western Education system.

Madrasas were seats of learning where higher education was imparted and teaching courses of theology, spiritual studies and languages and secular sciences were offered. Madrasa education was highly developed in early colonial India and had produced a record number of illustrious scholars, specialized in various branches of knowledge offering a remarkable intellectual and cultural life. Madrasa education was patronized the Mughal administration. They were being established in every subahswith local feudal lords endowing them with huge land-grants for maintenance. Every year thesemadrasas used to produce a large number of works in Persian, Arabic, Sanskrit, Bengali, Maithili and other vernacular languages on various subjects, having the financial ability necessary for the pursuit ofintellectual scholarships.

The general courses in a madrasa included the study of the Qur'an, the Hadith, theology, Islamic jurisprudence, history and other Islamic subjects. However, secular courses, such as logic, arithmetic, mensuration, medicine, chemistry, geometry, astronomy, physiognomy, rules of

government etc. were also taught in the madrasas. Mirza Nathan in his Baharistan-i-Ghaibimentioned that chemistry, medicine and other natural sciences were taught in the madrasas of Bengal, Bihar, Orissa, and Assam and also had noted that few madrasas offered specialised courses on Unani medicine and a large number of Kaviraj and other physicians were graduating from these madrasas and practising throughout the Indian subcontinent.

Though apparently, madrasas were seats of higher Islamic study and the teachers of the madrasa was called Maulavi who imparted knowledge on reading and writing techniques of Arabic and Persian, used to tell Islamic legends, and taught how to write deeds to the general Muslim students, the most of the students came from the higher caste Hindus and Hindu lecturers and teachers were also appointed to offer diverse courses; as to communicate within the Mughal administration Hindu aristocrats, nobles, officers and intellectuals, it was necessary to know Arabic and Persian languages and Islamic jurisprudence. The early British administrators had noticed the comprehensive courses of study at the madrasas. It is noteworthy to mention that reporting on the state of education in the provinces of Bengal and Bihar, in 1835, Adam praised that these 'Arabic schools' maintained a course of study of a very wide range. It included numerous grammatical works, systematized and profound, a complete course of rhetoric, logic and law, and studies of the external observances and fundamental doctrines ofIslam. The works of Euclid on geometry and Ptolemy on astronomy, together with natural philosophies and treatises on metaphysics were offered in some madrasas.

In 1781, at the request of the Muslims of Calcutta, Governor-General Warren Hastings founded the Calcutta Madrasa with the main objective being to teach Persian and Arabic language, Muslim law to the Indians who might be employed to the lower posts of the Courts of Justice, under newly introduced British Common Law. Abdul Karim in his scholarly work "Mohammedan Education in Bengal" had rightly observed that Warren Hastings wanted "to promote the study of the Arabic and Persian languages and Muhammadan law, with a view more especially to the production of qualified officers for the Courts of Justice. In this way, it was also an object to please the displeased Muslim aristocratic community because hopeful employment opportunity will be created for their children. It was also admitted through these efforts of Hastings that all hoped for the direct patronization of the government."

Comparing the diversity of the courses and the curriculum offered in the tols and the madrasas, Adam remarked that the instruction at the latter seats of learning had a more comprehensive character and more liberal intellectual tendencies than that pursued in the former and the learners educated in madras as possessed intellectual superiority and better employment credibility. Moreover, some madras as were dedicated to the education of Muslim girls. Furthermore, madrasa education in early colonial India was somewhat free from communal, caste, gender restrictions.

It is interesting to note that, the indigenous education system prevailing till early British India was a hierarchical network of pathshala, chatuspathi, tol, maktub and madrasa, a decentralised academic order which was participatory, self-sufficient but interdependent; thus, sparing administration from huge organizational and financial burdens. Despite existing religious, caste and gender prejudices, common people were not alienated from this education system, rather quite intimated to it and were part of it. Whether the Indigenous education system was necessary, whether it was self-sufficient, whether the British education system made it worst – are some of the questions of debate among historians. However, it is noteworthy that the indigenous education did not die a natural death, rather slow-poisoned by the colonial rulers to promote their education policies, which in pursuit of creating 'Brown Englishmen', engulfed the socio-cultural differences between an English educated elite and a vernacular mass. Dr K. K. Dutta has opined that the regular social subjects offered in the indigenous education curriculum dealt with problems of day to day life; hence made the students more aware and self-satisfactory, complimenting to the pre-modern self-sufficient feudal economy. Sumanta Banerjee believes that indigenous education was inexpensive; even rural lower-class people could also celebratea pathshala and maktubs and bear the cost of the teacher appointed there. Looking at this economic importance British East India Company administration could have sought of improvement of the existing education system instead of undermining it and could have retained it analogous to their municipal schools.According to Poromesh Acharya, the indigenous education of pre-colonial period was purely catering to the common people, but without any applied and vocational education,the meaning of literacy became baseless and redundant with the introduction of British colonialism. He points out that Macaulay's Minute and Bentinck's education policy gave theapprobation of grants proclamation. It was possible due to the amalgamation of western education withthe indigenous educations. So, the decline of the indigenous education started after it faced tough competition from the much robust and dynamic western education. Amitava Mukherjee thinks that the indigenous higher education system was litigating, repetitive and monotonous; hence its destination lies within its limits. Though the system's strongest point was the medium of instruction which were the vernacular languages spoken and understood by the community at large, it was not related with thepractical social life in transition during the 18^{th} century. The situation in the primary sector was the same; traditional, with no up-gradation to cope up with changing tide of the time. To identify the questions i.e. whether the indigenous education declined due to the western education or by its limits –even the Subaltern historianshave accepted that when the secular education became popular in the upcoming modern states of Europe, Indian subcontinent remained attached to its year-long traditional education guiding principles. The class and caste stratified indigenous education system could not bring the expected social transformation in India.Though western education

was colonial, it did open ahorizon of freedom of thought and expression, which were so far blocked by the theological inclination of learning. It is important to note that the social reformers i.e. Raja Rammohan Roy, Ishwar Chandra Vidyasagar, Swami Dayanand Saraswati, JyotibaPhule, Sir Syed Ahmed Khan, PanditaRamabai and others were primarily educated in this indigenous learning system; thus, understood that ignorance and backwardness in the society were responsible for hindering its progress and development and they accepted western education as a tool for psycho-social liberation. 'Man is born free' – this breakthrough perception reached the masses of colonial India through westerneducation only, which finally gave birth to Indian nationalism.

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3. Self-Efficacy in Relation to Academic Performance of Secondary School Students

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Abstract

efficacy of an individual influences his/her choices about life, motivation level, quality of working, strength to face difficulties and tendency to experience stress and depression (Dullas, 2018).

High self-efficacy improves a person's accomplishment and personal well-being in a number of ways. Students who are strong in terms of their self-efficacy are not apprehensive and challenged by complex assignments and projects. They consider challenging task as an opportunity for growth and mastery rather than threats that are to be avoided. They put more effort in the face of failure. On the other hand, individuals who are weak in their self-efficacy try to escape from adversities. Their level of aspiration is lowand they show poor commitment to the goals they choose to reach. They do not work hard and give up easily while handling complex situations. They are also slow to recover their sense of efficacy in the time of failure (Bandura, 1994).

Keywords: *Self-Confidence, Resilience, Goal Commitment, Motivation, Stress Management*

Introduction: According to Bandura (1977) the level of efficacy can be a reliable predictor of an individual's performance while doing a work, like whether the work will be started, the degree of effort given when faced with certain obstacles, and the persistence to complete the work in hand.

The term academic performance refers to the degree of success or level of attainment of a student in the scholastic or the curricular subjects within the syllabus. Academic achievement is the amount of knowledge that has been acquired from classroom learning.

Academic performance is the outcome of all educational activities. It is defined in different ways by different authors. It refers to any desirable output that is observed in the students. Any behaviour thatis learnt comes within the scope of achievement and performance. Crandall

suggested that performance is a behaviour directed towards the attainment of approval or the avoidance of disapproval in situations where the standard of excellence is considered.

Academic or scholastic performance means the attained level of a studentin school tasks such as English, Science, Mathematics or Social Science, as represented by scores or grades. Performance means all those behavioural changes which take place in an individual as a result of various kinds of learning experiences (Sangtam, 2019).

Self-efficacy determines how an individual will think, feel and act. Therefore, an individual's perceptionabout his own capabilities influences his behaviour greatly. Researchershave showed that a person's achievement motivation, learning and academic performance are often determinedby his self-efficacy (Pajares, 1996; Schunk, 1995, cited by Mahyuddin, Elias, Loh, Muhamad, Noordin& Abdullah, 2006). In this context, Schunk and Zimmerman (1994, cited by Mousoulides&Philippou, 2005) have opined that self-efficacy and academic performance of students are positively correlated and if they are taught how to enrich their self-efficacy, their academic performance also improves. Maximum number of researchers who studied the association between self-efficacy and performance have observed a strong positive relationbetween the two variables (Pajares& Miller, 1994). Students possessing high self-efficacy enjoy taking challenging tasks, are more energetic,have determination, and outshine in their academic performance in comparison to their counterpart (Bong, 2001, cited by Nasiriyan, Azar, Noruzy, Dalvand, 2011).

Objectives of the Study

Based on the review of related literature, the objectives of the present study are-

(i) To find out the nature of self-efficacy of male and female secondary school students.

(ii) To find out the nature of academic performance of male and female secondary school students.

(iii) To find out whether there is any difference in self-efficacy between male and female secondary

school students.

(iv) To find out whether there is any difference in academic performance between male and female secondary school students.

(v) To find out the relationship between self-efficacy and academic performance of male and female secondary school students.

Hypotheses

- H_o1: There is no significant difference between self-efficacy of male and female secondaryschool students.
- H_o2: There is no significant difference between academic performance of male and femalesecondary school students.

- Ho3: There is no significant relationship between self-efficacy and academic performance ofmale and female of secondary school students.

Method

Sample and Sampling Technique

The sample profile is shown in Table 1.Table 1.
Sample Profile of the Study

For carrying out the study purposive sampling technique has been used.

Research Design

The researcher followed a survey method.

Variable

The variables which have been taken in the present study are (i) Self-efficacy and (ii) AcademicPerformance

Tools

The following tools have been used:
The Self-efficacy Scale by A. K. Singh.
Marks of students in 1st term, 2nd term and Annual Examination have been taken as academicperformance scores.

Presentation Analysis, and Interpretation of Data

Self-efficacy Descriptive StatisticsTable 2.
Mean (M) and Standard Deviation (SD) of Self-efficiency Scores of Male and Female Students alongwith the Relevant Sample Size (n)

From Table 2 it is found that the mean self-efficacy scores as a whole and in all its dimensions, for thecombined, male and female groups are within the average.
The following pie diagrams show the percentage of male, female and combined group studentspossessing different levels of self-efficacy.

Figure 1 shows that 14 percent, 60 percent, and 26 percent of the male and female students possesshigh, average, and poor level of self-efficacy respectively.
Figure 2 shows that 16 percent, 64 percent, and 20 percent of the male students possess high, average,and poor level of self-efficacy respectively.

Figure 3 shows that 12 percent, 56 percent, 32 percent of the female students possess high, average,and poor level of self-efficacy respectively.
Inferential Statistics

Table 3.
Statistical Comparison between Male and Female Students' Self-efficacy

From Table 3, it is found that the difference between the pair of mean scores of self-Efficacies is not significant at 1% and even at 5% level (i.e., the hypothesis $H_o1$cannot be rejected in 1% as well as 5% levels). Therefore, the result establishes the fact that there is no significant difference between self- efficacy male and female of the secondary school students.

Table 4.
Statistical Comparison between Male and Female Students' Self-efficacy (in the Dimension of Self confidence)

From Table 4, it is found that the difference between the pair of mean scores of self-efficacies in the dimension of self-confidence is not significant at 1% level but significant at 5% level (i.e., the hypothesis $H_o1$is rejected at 5% level). Therefore, the result establishes the fact that there is significantdifference between self-efficacy of male and female of the secondary school students in the dimension of self confidence, the mean score of the male students being significantly higher than that of thefemale students.

Table 5.
Statistical Comparison between Male and Female Students' Self-efficacy (in the Dimension of EfficacyExpectation)

From Table 5, it is found that the difference between the pair of mean scores of self-efficacy (in the dimension of efficacy expectation) is not significant at 1% and even at 5% level (i.e., the hypothesis $H_o1$cannot be rejected in 1% as well as 5% levels). Therefore, the result establishes the fact that thereis no significant difference between self-efficacy of male and female secondary school students in the dimension of efficacy expectation.

Table 6.
Statistical Comparison between Male and Female Students' Self-efficacy (in the Dimension of PositiveAttitude)

From Table 6, it is found that the difference between the pair of mean scores of self-efficacies (in the dimension of positive attitude) is not significant at 1% and even at 5% level (i.e., the hypothesis $H_o1$cannot be rejected in 1% as well as 5% levels). Therefore, the result establishes the fact that thereis no significant difference between self-efficacy of male and female secondary

school students in the dimension of positive attitude.

Table 7.

Statistical Comparison between Male and Female Students' Self-efficacy (in the Dimension of Outcome Expectation)

From Table 7, it is found that the difference between the pair of mean scores of self-efficacies (in the dimension of outcome expectation) is not significant at 1% and even at 5% level (i.e., the hypothesis $H_o1$cannot be rejected in 1% as well as 5% levels). Therefore, the result establishes the fact that there is no significant difference between self-efficacy of male and female secondary school students in thedimension of outcome expectation?

Academic Performance Descriptive Statistics Table 8.

Mean (M) and Standard Deviation (SD) of Academic Performance Scores of Male and FemaleStudents along with the Relevant Sample Size (n)

From Table 8, it is found that the mean academic performance scores for the combined, male andfemale groups are within the average.

Inferential Statistics

Table 9.

Statistical Comparison between Male and Female Students' Academic Performance

From Table 9, it is found that the difference between the pair of mean scores of academic performancesis not significant at 1% and even at 5% level (i.e., the hypothesis H_o2 cannot be rejected at 1% as well as 5% levels). Therefore, the result establishes the fact that there is no significant difference between academic performance of male and female secondary school students.

Relation between Self-efficacy and Academic Performance

Table 10.

Pearson's Correlation and Spearman's Rank Correlation between Self-efficacy and AcademicPerformance of the Secondary School Students

From Table 10, it is found that there exists a positive correlation between self-efficacy and academic performance of secondary school students. The correlation coefficients are significant at 1% level in the case of the combined group as well as for the females. Therefore, H_03 is

rejected at 1% level in these cases. But the correlation co-efficients are not significant in the case of the males and therefore $H_0$3 cannot be rejected in the case of males.

Discussion

he presents study shows that a positive and significant relationship exists between self-efficacy and academic performance of secondary school students. This may be because of the fact that students who believe in their innate ability to achieve goals are more self-confident and focussed on their target. As a result, they put continuous effort in their studies and perform better in their academics thantheir peers who possess low self-efficacy about themselves.

The study also emphasizes that male and female secondary school students do not differ significantly in their self-efficacy and academic performance. This may be a result of the equal facilities, infrastructure and environmental treatment that are provided to the students of these days, irrespective of their gender.

Implication of the Study

The present study has ample implications for the secondary school students. A good school and classroom environment is necessary for students' academic career. Teachers and parents must always consider the level of self-efficacy of the secondary school students and help them to develop the quality. Teachers must always keep in mind the factor of individual difference among the secondary school students and accordingly prepare and modulate their classroom teaching Since the secondary school stage is a crucial stage in determining one's personality and career, the students must always beencouraged to develop their self-efficacy.

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4. Prevalence estimates of Neurotic tendencies among Differentially abled students in relation to their achievement motivation

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Abstract

per cent mentally retarded of the total national population. In India as per census (2011) 2.68 Cr. persons are disabled which is 2.21 % of the total population. The age wise distribution of disabled population as per census (2011) in India: 17% of the disabled population is in the age group 10-19 years and 16 persons of them are in the age group 20-29 years of the total disabled population. The distribution as per type of disability according to the census (2011): 20% orthopedic impairment, 19% visual impairment, 19% hearing impairment and 8% multiple disabilities. The dependent disabled population as per census (2011) in India is: 42.7% visually impaired, 38.7% hearing impaired, 33.5% speech impaired and 49.8% orthopedically impaired. Disability statistics in India (2017) highlighted that 19% visual impairment, 19% hearing impairement,7% speech impairement,20% orthopedic impairment, 6% mental retardation, 8% multiple disability ,3% mental illness & 18 % other types of disabilities. According to the report of Asha Bhawan Center (2015) in India persons with disabilities often have lower education accomplishments, poor health conditions, higher poverty rates and less economic engagement than people without disabilities. As it is quite marked that senses are called gateways of knowledge.

Keywords: *Disability Statistics, Age Distribution, Impairment Types, Education Challenges, Economic Disengagement.*

Introduction: Visual impairment is a condition in which an individual's vision is deficient to such an extent that it markedly affects his/her working. There are four major categories of visually impaired childrensuch as partially sighted, low vision, legally blind and totally blind. A partially sighted child is the child who has some complication in seeing and in overall impression, requires special assistance with learning. Low vision indicates a more serious

problem, where reading at normal distances is not possible. Children with low vision have to use supportive arrangements to read and see in their environments. Legally blind refers to a vision less than 20/200. Children who are legally blind cannot see things clearly, whether it is near or far. The visually impaired children can be identified by various symptoms such as crossed eyes, enlarged eye lids, watery eyes, itching, lethargy, headaches, rubbing eyes markedly, blinking frequently and holding substance or books close to the eyes. Visual impairment can be caused by numerous types of eye disorders such as cataracts, infection, glaucoma, albinism, diabetic retinopathy etc. Seeing that per official reports of World Health Organization (WHO 2012), the 285 million people are estimated to be visually impaired worldwide: 39 million are blind and 246 have low vision. The 90% of the world's visually impaired population live in developingcountries. According to the report of World Intellectual Property Organization (WIPO 2008), there areabout 39 million people across the globe that are blind, out of these India is a home to about 15 million of them. India has a large size of population of the blind community and the majority of them reside inthe poorest parts of the nation with small or no right of entry to even basic health care facilities. The 80 per cent of them (9.6 million) could have been prevented from going blind if they had received time-honored treatment? But poverty, which is both a cause and effect of blindness, can be very hardto smash and shatter, especially in the rural areas where most visually impaired people live. The sense of hearing provides a background, which gives a feeling of social security, safety and involvement in social environment. Hearing is the ability to perceive sound. A person suffering from hearing impairment has difficulty in perceiving or identifying sound clearly due to auditory problems. Conductive hearing loss occurs when damage to the outer ear or middle ear blocks sound vibrations from reaching your inner ear or cochlea. Common causes include malformation at birth, middle ear infections, skin growth or cyst, chronic ear infection, tumors, draining ears, cholesteatoma, syndromes like Downs, Goldenhar and Treacher etc. With proper medication, surgery and hearing aidsconductive hearing loss can be treated. Sensorineural hearing loss occurs when the inner ear (cochlea)or hearing nerve is damaged or does not work properly. The sounds are not only softer but also difficult to understand especially when it is noisy. Common causes include congenital, ageing, exposure to loud noise, head injury, genetics, Meniere's disease, Meningitis, adverse reactions to medications. It can be treated by hearing aid, cochlear implants. Mixed hearing loss refers to a combination of conductive and sensorineural hearing loss. This means damage in both outer or middle ear and the inner ear. It can be treated by medication, surgery, hearing aids, bone conduction devices etc. According to the estimates of WHO (2005) the 278 million people have disabling sensory hearing defect. The WHO (2018) also reported that prevalence of hearing impairment in India is around 6.3% (63 million people suffering from significant auditory loss (04 in every 1000 suffer from hearing loss).As per

National Sample Survey Office/NSSO (2001) there are 291 persons per one lakh population who are suffering from severe to profound hearing loss. As it is Quite evident that disablity gives birth to the psychological problems like neurotic tendencies and other mental health related issues.

Neurotic tendencies is characterized by anxiety, worry, moodiness, shyness, anger and aggression. Anxiety is a common neurotic disorder almost 5% of the general population being affectedas per the reports of American psychiatric association (APA). The frequent and known symptoms of anxiety includes excess amount of sweating, numbness, muscle tension, tremors and hypertension. Thebenzodiazepines and anti-depressants are the basic medications and psychological treatments to help individuals with anxiety disorders. Individuals with phobias experience intense and irrational fears of objects or situations that usually lead them to avoid that particular thing. The neurotic individual is very much ego centric, fails to maintain friendly interpersonal affiliation with others in the society. Seeing that the reports of Global health conference that vision loss remains a considerable forecaster of depression, anxiety and stress. Article 2 asserts that children should never be discriminated on grounds of disabilities. These children may need additional support and resources to fulfill their potential including rehabilitative care, surgical intervention, assistive devices. In more developed countries, medical and surgical advances have brought significant improvements to the health and well-being of many children with disabilities. The level of achievement motivation denotes success or failure of an individual especially disable community.

Achievement motivation is generally regarded as the force to achieve targets and the process to sustain the drive. Motivation provides an important foundation to complete cognitive behavior, such asplanning, organization, decision-making, learning, and assessments (Pintrich & Schunk, 1996).

Objectives:

- To study the neurotic tendencies and achievement motivation of differentially abled viz. visuallyimpaired and hearing-impaired secondary school students.
- To compare visually impaired and hearing-impaired secondary school students on neurotictendencies.
- To compare visually impaired and hearing-impaired secondary school students on achievementmotivation.
- To find the relationship between neurotic tendencies and achievement motivation of differentiallyabled viz. visually impaired and hearing-impaired secondary school students.

Hypotheses:

- There is no significant difference between visually impaired and hearing-impaired students onneurotic tendencies.

- There is no significant difference between visually impaired and hearing-impaired students onachievement motivation.
- There is no significant relationship between neurotic tendencies and achievement motivation ofdifferentially abled students.

Methodology and procedure: The study was planned to study neurotic tendencies of differentially abled students in relation to their achievement motivation as such; descriptive method of research was used.

Sample: The sample for the present study consists of 100 students, 50 visually impaired and 50 hearing impaired. The differentially abled viz. visually impaired and hearing impaired has been identified from the various secondary school institutions of Kashmir Division. The investigator collected the sample by employing purposive sampling technique.

Tools used: R.N. Kundu Neurotic Personality Inventory and Pratibha Deo and Asha Mohan Achievement Motivation Scale were administered to the sample subjects.

Statistical treatment: The data for the present investigation has been analyzed by applying mean, standard deviation, t-test and correlation.

Analysis and interpretation: In order to prove the hypotheses whether they accepted or rejected, the data was stastically analyzed by employing t-test and correlation.

Table 5.1: Mean comparison of visually impaired and hearing-impaired secondary school students on Neurotic Personality Inventory (N=50 in each group).

The Table 5.1 shows the mean comparison of visually impaired and hearing-impaired secondary school students on neurotic personality inventory. The calculated t-value (1.4) is less than the tabulated t-value (1.97) at 0.05 level of significance, which depicts that there is no significant difference between visually impaired and hearing-impaired secondary school students on neurotic tendencies. A quick look at the means of the above table clearly depicts that both visually impaired and hearing-impaired secondary school students are similar in neurotic tendencies like restlessness anxiety, phobias, stress, anger and depression, etc. Thus from the confirmation of the results from the above table, the null hypothesis no. 1 which reads as, "There is no significant difference between visually impaired and hearing impaired secondary school students on neurotic tendencies", stands accepted.

Fig. 5.1: Mean comparison of visually impaired and hearing impaired secondary school studentson Neurotic Personality Inventory.

Table 5.2: Showing the mean comparison of visually impaired and hearing impairedsecondary school students on achievement motivation scale (N=50 in each group).

The Table 5.2 shows the mean comparison of visually impaired and hearing impaired secondary school students on achievement motivation scale. The calculated t-value (0.62) is less than the tabulated t-value (1.97) at 0.05 level of significance, which depicts that there is no significant difference between visually impaired and hearing impaired secondary school students on achievement motivation. A quick look at the means of the above table clearly symbolizes that visually impaired and hearing impaired secondary school students have low achievement motivation. The physical impairment hinders their participation to perform an activity and results low level of achievement motivation. Thus from the confirmation of the results from the above table, the null hypothesis no. 2 which reads as, "There is no significant difference between visually impaired and hearing impaired secondary school students on achievement motivation", stands accepted.

achieve the goals and build satisfactory relation with teachers, friends, family members, etc. They lack the inner belief in their ability to be successful and be likely to withdrawn, unmotivated, lazy, overly sensitive to criticism, distrustful, and pessimistic which adversely affects their achievement motivation.

In the light of the empirical evidences discussed above, the hypotheses numbers 3 stands rejected.

Conclusion:

The two groups of physically challenged secondary school student's viz. visually impaired and hearing impaired were compared with each other on neurotic personality inventory and achievement motivation scale. It was found that there is no significant difference between visually impaired and hearing impaired secondary school students on neurotic tendencies and achievement motivation. Both the categories with neurotic tendencies tend to have more depressed moods and they commonly suffer from feelings of guilt, jealousy, anger and nervousness, more repeatedly and more severely. Neurotic tendencies negatively affect their ability to function effectively in the activities of daily living, such as going to work and school, and taking care of basic needs. Side by side with those main symptoms there are other morbid indications, such as irritability, sudden bursts of anger, aggressiveness and fickleness found commonly in them. The psychic, emotional tension and behavior disturbances also adversely effects their achievement motivation, level of aspiration, self esteem etc. It has found that there is a negative correlation between "neurotic tendencies and achievement motivation "this suggests that the variables neurotic tendencies and achievement motivation" moves in opposite direction, that means higher the achievement motivation; lower will be neurotic tendencies. Neurotic tendencies are the cluster of negative traits viz. anxiety, fear, stress, depression,

irritability etc. Those who score high on neuroticism and are more likely to experience number of problems like psychic, emotional tension and behavioral disturbances. As a result, feelings of worthlessness or inappropriate guilt, difficulty in thinking or concentrating and fail to build satisfactory interpersonal relationships with family members, peers, teachers etc. which adversely affect their achievement motivation, educational performance and self-esteem. Both visually impaired and hearing impaired categories feel inferiority due to physical impairment. They are not being ready and eager to face new situations and carry out difficult tasks, generally are withdrawn, inactive, lazy, sluggish, and unmotivated for their achievement, therefore lack of motivation and lack of self-confidence are two of the main reasons for failure and of living an upset, anxious, depressed, worried, ordinary and dissatisfied life. The main findings are in support of the present investigation: Barnes (2005) reported that high trait anxietymales would show the greatest decrease in performance. Rücker, J.C. (2012) study point out those students are often prone to stress, which can have several negative impacts on their health and the waythey accomplish tasks. Academic Motivation Scale, the Perceived Stress Scale and additional questions concerning their academic performance and possible stressors. It was found that both genderand native language affected the level of perceived stress. In addition to that, the feeling of stress was significant correlated with the failing rate of courses. Not being motivated was found to be associated with higher levels of stress and a lower Grade Point Average.

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5. Psychical Education: Educating the True Being

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Abstract

desire-soul, govern entirely the outer nature-mind, life and body, then, the whole nature can be turned towards the real aim of life, the ascent into spiritual existence.

The mental being within watches, observes and passes judgment on all that happens. The psychic being does not watch and observe in this way like a witness, but it feels and knows in a much more direct and luminous way and so, whenever it comes to the front it reveals spontaneously what are the right and the wrong movements. It is through this psychic presence that an individual is able to realize the truth about life around him and about himself: that he is more than what he appears to be i.e. a body, a vital, and a mind that there is a purpose to life, which he must endeavor to understand. Although the psychic presence exists and acts in each one of us all the time – shaping our lives, our destinies – the presence often goes undetected, unperceived, by individuals unless an effort is made to understand it.

Keywords: *Psychic Presence, Spiritual Ascent, Inner Truth, Mind-Body Connection, Life Purpose*

Introduction: Till recently, the discovery of the psychic being was a subject overlooked by conventional modern systems of education. The discovery of the psychic presence is an experience, which varies from individual to individual. When an individual discovers the presence within him, the truth, the valuationof his very existence comes into contact with him. And, as the truth dawns on an individual he learnsto cope with all the strains and stresses of his life: he is in control, conscious of his destiny and master of his life. It is for this reason alone that the mastery of the psychic presence is necessary for every individual; every society and that psychic education should be made a part of any learning program.

While defining Sri Aurobindo's views on education the Mother has asserted that education to be complete must have five principal aspects corresponding to the five principal activities of the human being; the physical, the vital, the mental, the psychic and the spiritual. Giving a brief background ofthe physical, vital and mental education the paper will elaborate its main concern- Psychic Education- in the paragraphs to follow:

Of all the domains of human consciousness, physical is the one that is most governed by method, order, discipline and process. That is why physical education must be rigorous and detailed, far-sighted and methodical in order to be effective. The vital education has two principal aspects, very different in their aims and methods, but both equally important. The first concerns the development and proper use of the sense organs. Then, to this general education of the senses and their functioning there has to be added, the cultivation of power of discrimination and of the aesthetic sense. It leads to the second aspect of the vital education that deals with the increasing awareness and control of the character, culminating in its transformation. A true mental education aims at the development of the power of concentration, mental silence, organisation of one's ideas around a higher ideal and thought- control.

The above mentioned three lines of education - physical, vital and mental - could be defined as the means of building up the personality. With psychic education we come to the problem of the true purpose of life on earth. Unfortunately the conventional system of education has ignored this dimension of education. The Mother has given a few points in her essay on 'Psychic Education' for getting in touch with the psychic:

a. To give up all personal seeking for comfort, satisfaction, enjoyment or happiness. It does not mean advocating austerities, but it means not to be preoccupied with the body's comfort.
4. To take pleasure in whatever is done, but not to do anything for the sake of pleasure.
5. Not to complain of the behaviour of anyone, unless one has the power to change in his nature what makes him act in this way; and if one has the power, he should change him instead of complaining.
6. To remain perfectly calm in the face of all circumstances without getting excited, nervous or agitated.
7. Not to take physical happenings at their face value. They are always a clumsy attempt to express something else, the true thing which escapes our superficial understanding.
8. Whatever is done, never forget the goal. Thus before eating, concentrate a few seconds in the aspiration that the food may bring your body the substance it needs to serve as a solid basis for the effort towards the great discovery
9. Before going to sleep, concentrate a few seconds in the aspiration that the sleep may restore fatigued nerves, bring quietness to the brain so that on waking, journey on the path of the great discovery may begin with renewed vigour,
10. Before acting, concentrate in the will that this action may help or at least in no way hinder the march towards the great discovery.
11. When speaking, concentrate just long enough to check the words and allow only those that are absolutely necessary to pass.

Mother emphasized that the will for the great discovery should be always there like a huge bird

of light dominating all the movements. In the words of Mother “The starting-point is to seek in yourself that which is independent of the body and the circumstances of life... that which carries in it a sense of universality, limitless expansion, unbroken continuity. Then you decentralize, extend and widen yourself; you begin to live in all things and in all beings; the barriers separating individuals from each other break down. You think in their thoughts, vibrate in their sensations, feel in their feelings, live in the life of all. What seemed inert suddenly becomes full of life, stones quicken, plants feel and willand suffer, animals speak in a language more or less inarticulate, but clear and expressive; everything is animated by a marvellous consciousness without time or limit. And this is only one aspect of the psychic realisation; there are others, many others. All help you to go beyond the barriers of your egoism, the walls of your external personality, the impotence of your reactions and the incapacity of your will.”
Then an inner door suddenly opens making the individual free from all chains and making himconscious of his destiny, master of his life. And yet this release from all slavery to the flesh is not thesupreme goal. There are other steps to climb before reaching the summit, here comes spiritualeducation. The two- psychic education and spiritual education- are usually confused under the generalterm of "yogic discipline", although the goals they aim at are very different: for one it is a higherrealisation upon earth, for the other it is a return to the unmanifest. To become conscious of thepsychic being one must abolish all egoism; but to live a spiritual life one must no longer have an ego. Mother believed that the true solution to the problem of suffering, ignorance and death is atransformation brought about by the logical continuation of Nature's ascending march in her progresstowards perfection, by the creation of a new species that will be to man what man is to the animal and that will manifest upon earth a new force, a new consciousness and a new power. And so will begin anew education which can be called the supramental education; in contrast with the types of educationmentioned previously, which progress from below upwards by an ascending movement of the being,the supramental education will progress from above downwards by a descending movement. Thiseducation will work not only upon the consciousness of individual beings, but upon the very substanceof which they are built and upon the environment in which they live. Consequently, it will result nolonger in a progressive formation of human nature and an increasing development of its latentfaculties, but in a transformation of the nature itself, a transfiguration of the being in its entirety, a new ascent of the species above and beyond man towards superman, leading in the end to the appearance ofa divine race upon earth.

Unfortunately, till now, the discovery of the psychic being and identification with it have not been among the recognized subjects of education. Educational programs, generally, ignore this

important aspect in the development of an individual. It is essential, that the students are urged and assisted to discover the psychic aspect of their beings, which goes beyond the bounds of their present life and enables them to share in a higher and a vaster life.

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6. Investigation of Misconception in Certain Concepts of Science among Secondary School Students of Tribal dominated region of Madhya Pradesh

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Abstract

Scientific concepts embedded in every individual life. Our Nation's vision is to provide high-quality science education for every students in the country across all levels of education. Particularly in the school education, the first and foremost objective of teaching is that the students should acquire and understand the scientific concepts and they should become scientifically literate citizen. To fulfil the objective, substantial efforts has been taken by launching different programmes such as SSA, DPEP, operation blackboard etc, also national and state level educational agencies such as NCERT, SCERT striving to improve the quality of science teaching and learning.

Keywords: *Science Education, Scientific Literacy, Educational Programs, Quality Improvement, Curriculum Development*

Introduction: The quality of science teaching depends upon the teachers, they are the first and foremost sources to impart scientific knowledge. The quality of science teaching act as a major fulcrum for the students to attain the mastery in scientific knowledge, also it enhance students' thinking skills, otherwise students face conceptual conflict that leads to hold misconceptions or alternative conceptions or incorrect understanding of unscientific ideas, models, objects or events, notions, beliefs, or false schema or theories. The misconceptions are very common among school students. The concept of misconceptions is defined by various researchers. According to Teresa et al, (2019) misconceptions refer to students' ideas that are differentfrom the ones generally accepted by scientist. Other terms also used by various researchers such as alternative framework (Soeharto et al, 2019) and alternative conceptions (Hewson and Hewson, 1996).The reasons for holding misconceptions are instructional strategy, textbook, parents,

peers, media, overload content, cultural background. However one of the most important cause for persistence of misconception is ineffective method of teaching because students come to school from different personal and cultural background, their mind is not tabula-rasa they hold preconceived ideas and self- developed concepts gained through observations of surroundings and daily life experiences which maybe undoubtedly incorrect but it is the teachers' role to identify the students misconceptions and replace with scientifically accepted explanations. Sometime, it is obvious that during teaching learning process, students may encounter some difficulties in understanding the concepts. If the students fail to understand the scientific explanation they face cognitive conflict, in such situation students follow rotememorisation that led to develop misconceptions. These misconceptions act as an obstacle for understanding advanced concepts in science (Canpolat, 2006, Pabuccu and Geban, 2006). Therefore it is advisable that the teacher must take conscious effort to identify students misconceptions prior to teach the concepts (Haim Eshach, 2017). It was recommended by NCF (2005) that there should be a paradigm shift in pedagogy that away from rote memorization of facts and presentation of bookish information by teachers to construction of knowledge by student-led investigations and in-depth analysis and understanding of concepts through the process of inquiry and discovery so on. But it is unfortunate that most of the time teachers may not be prepared to teach in the ways envisioned by the Curriculum. There is a disparity between the vision embodied in the curriculum and current science teaching. Most of the time teacher rushing to complete the syllabus and majority of schools possess poor infrastructure facilities such as laboratory, computer etc. Making attempt to identify students' misconceptions is least priority for the teachers. Majority of school teachers follow traditional instructional practices, teacher reading and explaining the science concepts to the whole class, and students are the passive listeners; results students fail to grasp and unsuccessful in understanding the basic concepts of science, their content knowledge become insufficient and exacerbated. Particularly Science teaching in tribal region is far from satisfactory due to several problems such as single teacher, over-crowded classroom, para teachers, teacher absenteeism, dropout, and language and medium of instruction etc. All these problems are seriously affect students learning outcome. Keeping all these in view, a descriptive survey was conducted to investigate the students misconceptions and its causes.

Review of Related Literature:

Extensive research has been conducted on misconceptions from primary to tertiary education national and international level in the following concepts such as photosynthesis and respiration, diffusion and osmosis, plant cell and animal cell, acids and bases, transpiration and evaporation, mass and weight, current and electricity, breathing and respiration etc. Suleyman Aydin, Pinar Ural, and Mehmet Akif (2012) did a work on ˙establish the misunderstandings that science

teacher students have about optics' and collected the data from 35 sophomore students of Agri Education Faculty, Science Teaching Program, by applying a 3-tired multiple choice test, which contained 19 question articles and making interviews with ten different students. The result of the tests and interviews with teacher students shows that students have misunderstandings about "light propagation", "light reflection," and "light refraction". Some misunderstandings about light refraction are; "Special beams have drawn as they arereflected from the thin and thick edged lenses" and "Speed of light is constant and has the same value in all mediums". Some misunderstandings about reflection are; "About the formation of an object's view at plane mirror, the changes of level and the place of source of the light that illuminates the object and changes of the level and place of observer change the view that appears in the mirror" and "Special beams don't reflect but refract and pass through the mirror". In addition, to know that teacher candidate students have a low level of understanding about 'light propagation', 'light reflection' and 'light refraction.' In order to establish these misconceptions and fix them in relative programs, representative classes are needed and this is important for science education. Benjamin and Gale (2013) in their study ΄Transforming Misconceptions: Using Transformative experience to promote positive affect and conceptual change in students learning about biological evolution' to explore the effectiveness of the Teaching for Transformative Experiences in Science (TTES) model (Pugh, 2002) for facilitating conceptual change and positive affect in college students learning about evolution. Fifty-five undergraduates experienced instruction on six key evolution concepts (adaptation, variation, inheritance, speciation, domestication, and extinction). Instruction enhanced with the TTES model wascompared to a conceptual change intervention, using refutation text and discussion. Outcomes were assessed using the Evolutionary Reasoning Scale (Shtulman, 2006), the Transformative Experience Survey (Kevin, Lisa, Kristin, Victoria, & Christine, 2010), and the Evolution Emotions Survey. The results showed that the group that experienced the TTES model showed higher levels of transformative experience and greater conceptual change than the comparison group. In addition, the treatment group showed an increase in enjoyment of the evolution content over the course of instruction. Implications for transformative experience as a conceptual change pedagogical technique are discussed. Vitharana (2015) conducted a study on ΄Student misconceptions about plant transport –a Sri Lankan example' to identify 10^{th} grade students' misconceptions on plant transport with the use of two-tier diagnostic test. The first tier examined the content knowledge and the second tier the reasons for the content. The conceptual knowledge examined in the test items were water absorption, mineral salt absorption, transportation of water, transpiration, organic food transportation. The diagnostic test was administered on 180 students of 10^{th} grade. The results revealed that students possessed 18 misconceptions. The highest number of misconceptions was recorded in the areas of organic food transportation and the transpiration. The most common

misconception was found in the area of organic food transportation. Daud, Mery, Andrea (2017) in their research paper Misconceptions sequencing the chemical processes in Daniell and electrolysis cells amongst first-year science and mathematics education university students and found that there was a higher level of misconception within the students' understanding of the electrolysis cell of molten NaCl (44%) when compared to their understanding of the Daniell cell (31%). For the Daniell cell, the half-reduction reaction (51%) was the most common misconception amongst the students, whilst for the molten NaCl cell ion migration (65%) appeared to be so. Narendra D.D., & Veena M. Deshmukh. (2018) in their paper ˙Textbook: A Source of Students' Misconceptions at the Secondary School Level' conducted a survey in relation to students' ideas about various life processes such as respiration, photosynthesisand transport of material and the causes that may have led to the misconceptions. In the process of identifying the causes for the students' misconceptions, the authors analyzed NCERT and SCERT Science textbooks of secondary level and identified that the textbook is one of the sources of students' misconceptions. School textbook is a major resource in school for both teachers as well as students. The following reasons for student confusion and misconceptions are identified: 1. It is a well known fact that students are not 'blank slates', they come with their ideas and experiences. So there is often unexplored conflict between students' everyday experiences and the classroom or textbook presentation. 2. The language used by teachers and textbooks creates confusion in some students. 3. Everyday use of certain terms, such as respiration, weak heart, impure blood and pure blood, impure air, etc. often used in non-scientific contexts, contributes to students' confusion. Some words have many different connotations in the English language and the "scientific word" can easily be confused with a commonly used term. 4. At school level many concepts, such as photosynthesis, circulation, respiration, excretion, are just too abstract for many students who are still at a concrete learning stage. It is difficult for many students to understand these concepts if they are not concretized. — In teacher education programme there is a need to prepare teachers to look critically at school textbooks so that the advantages and limitation of the textbook are identified and ways of overcoming limitations are designed. 5. Science teachers, particularly upper primary school teachers, should be aware of numerous science misconceptions in the teaching literature. Danilo Rogayan Jr and Michelle M Albino (2019) conducted a descriptive-survey research ˙Filipino Students˙ Common Misconceptionsin biology: Input for Remedial Teaching˙ to reports the common misconceptions in Biology among Filipino junior high school students in a public secondary school in Zambales, Philippines as an input in crafting a remedial teaching program. The study utilized a validated researcher-made tool which was answered by a total of 100 The Grade 10 students. The study revealed that the level of the misconception of students is high in genetics (55.00%); and moderate in ecology (43.50%), botany (44.10%), and zoology (38.30%).

The crafted remedial teaching program contains suggested pedagogical techniques to correct students' misconceptions. The study recommends that Science teachers may gauge the prior understanding of the students in the important concepts in biology during the teaching-learning process so they can check the students' misconceptions and strengthen their conceptual understanding through fun and innovative approaches. Teachers may likewise integrate the proposed remedial teaching program in the actual delivery of the lesson or may conduct after-class remediation to the students who have held misconceptions in important concepts in biology. Future researchers may consider students from other grade levels as respondents in a parallel study which may also include other areas of biology.

Need and Significance of the Study

One of the main objective of teaching science in school is students should learn and understand the scientific concepts. As it was stressed by NCF (2005) that the "content validity" requires the curriculum must convey significantly correct content. These basic contents are the foundation for the students to understand the higher-level knowledge in science. Students can learn science informal way by observing the world around them. Piaget (1964) stated that learning takes place in the light of a student's existing conceptions and previous experience. Students ideas, believes, assumptions and understanding about science may differ from scientific explanations. Due to various reasons students hold several misconceptions or alternative conceptions in their cognitive framework. These misconceptions may be due to teachers, ineffective teaching, parents, textbook, cultural background, etc. These misconceptions are tend to persistent for long time even student become adult and entering into higher education, it is very difficult to change. Misconceptions are tending to persistent for long time even student become adult and very resistant to change. National Research Council, 1996 stated that misconceptions are the hindrance for acquisition of further scientific knowledge. However to larger extent misconceptions can be removed by adopting appropriate teaching but it is unfortunatethat most of the time science teachers ignore students' misconceptions. Prevalence of misconceptions in science among school students has been extensively studied by many researchers in different regions of India (Sushil, 2003, Nandini Sahay 2020). None of the study has been conducted in the tribal dominated region of Anuppur District of Madhya Pradesh. Educational status in this tribal regionis inadequate and far behind. Students facing many challenges such as shortfall of science teachers, inadequate science laboratory, unsatisfactory method of teaching, language problem, and medium of instruction, serious dropout, irregular attendance etc. According to Madhya Pradesh State MDGReport (2014-15) published by National Institute of Public and Policy and UNICEF (2016), the state heavily relied on para teachers, single teachers wherein one teacher manages all the classes, also
teachers engaged in performing administrative functions, particularly all of these single teacher

school located in tribal hamlets and villages and cater to the children from marginalised communities, and available infrastructure far from complete, high dropout rate. Research findings also reveal that the educational development in the tribal belt is a distant dream (Sujatha, 1994, Lal, 2010). All these problems adversely affect students learning and it leads to creation of misconception. Hence there is a dearth need to study prevalence of misconceptions among tribal students, therefore a survey was conducted among secondary school students (8^{th} and 9^{th}) to investigate Students misconceptions and itscauses with the following objectives and research questions.

Objectives of the Study

1. To investigate the misconceptions in science among secondary school students in the tribal dominated region of Madhya Pradesh.
2. To study the causes of misconceptions in science among secondary school students in tribaldominated region of Madhya Pradesh.

Research Questions

1. Does the secondary school students in the tribal dominated region holding misconceptions inscience?
2. On which concepts in science the students are holding misconceptions?
3. What are the reasons for creation of misconceptions in science?

Method of the study

A descriptive survey method has been employed. Qualitative research design was followed to collectthe data and qualitatively described the reality of misconceptions in certain concepts of science.

Sample

Purposive sampling method has been adopted for choosing the schools. The schools were chosenbased on the availability of large number of tribal students. All the 8^{th} and 9^{th} class students from ten schools (total number of students are 532 among 311 students from class eight and 221 students from class nine) were the sample for the present study. Most of the students belonging to the tribalcommunity such as Gond, Baiga, Baghel, Panika, however very few students in each class are non- tribes. The literacy rate of tribal is 59.68 (Anuppur block) and 59.33 (Pushparajgarh block) which is much lower than the District literacy rate (80.28) and State literacy rate 69.32 (Source: Census of India, 2011, Madhya Pradesh).

Tools and Techniques

The following tools and techniques was constructed and administered by the investigators to collectthe data.

Questionnaire: To construct the misconception tool, first and foremost to identify the

misconceptions on Science concepts. An in-depth analysis on earlier studies and also on the science text book of class 8th & 9th of Madhya Pradesh State was made. Further, discussed with science teachers to identify the concepts. Finally the following concepts has been identified: Photosynthesis, respiration, breathing, microorganisms, current, electricity, forces, mass, weight, acid and base, mixture, compounds, substances, etc. After identification of concepts, 150 Yes or No questions were prepared and the tool has been validated by subject experts. The developed tool has been piloted in one of the school and the students' suggestions were incorporated.

Interview: A face to face interview also conducted with the sample to study student's misconception and its causes. During interview, questions were asked to randomly selected students of class 8th and 9th, further probed to know their understanding of concepts in science.

Focus Group Discussion (FGD): To study the causes of misconceptions, FGD has been conducted with students. During the discussion, the following questions were asked about which methods of teaching followed by science teachers; what are the learning resources commonly used by the students; students every day attendance, reading skill test (oral), laboratory experiences. Further more questions were posed to obtain more responses.

Data Analysis

The collected data through questionnaire was analysed by frequencies and percentage; the data collected through interview and FGD was analysed by qualitatively such as triangulation coding and decoding of data.

Graph-1: Percentage of students on misconceptions in Selected Topics of science

The findings reveal that 55% of students were unable to distinguish between the concept of photosynthesis and breathing. Students holding misconceptions that photosynthesis and respiration are same processes and the terms are used interchangeably. They believe that photosynthesis takes place only in presence of sunlight, if there is no sunlight no photosynthesis; also they think that photosynthesis will not occur in green light or red light or any other colour light other than sunlight. Further students hold misconceptions that photosynthesis takes place in day time and respiration takes place in night time in all plants. Their understanding was that the oxygen is liberated during day and night as well. Students believe that there are separate cells in plant for respiration. Also students holding misconceptions that only green plants has chloroplast and non-green plants does not have chloroplasts, hence green plant only perform photosynthesis and non-green plants do not perform photosynthesis, hence non-green plants takes food from soil.

- It was observed that, 73% of students could not fully understand the difference between respirationand breathing; they believe that respiration is the process that breathe in oxygen and breathe out carbon dioxide. Also their misunderstanding was that respiration takes place

in the lungs, whereas breathing takes place in the heart.

- With regard to microorganism, most of the students understandings was correct, they stated that all microbes are not harmful, only some microbes such as bacteria are beneficial to human being where as 58% of students responded that all microorganisms such as bacteria and virus are harmful and it always cause disease to living organisms both plants and animals.
- It was observed that 76% of students holding misconception that the digestion starts in the stomachand end in large intestine. Students do not know that digestions starts in the mouth and ends in small intestine, they think that food goes from the stomach to the blood stream. Further they believe that digestion is the process which stomach releases energy from food. Their misconceptions was that the digestion is process performs by stomach alone. Students unable to differentiate between excretion andegestion; the body discharged undigested food through anus called excretion; egestion was that the body releases waste materials through skin, lungs and urine.
- 78% of students responded that the function of the heart is to generate blood and blood cells, they believe that pure blood is circulating in the right side of the body, and impure blood is flowing in left side of the body; students think that the energy is produced by the heart; also students misunderstanding that oxygen we breathe makes the blood very thicker.
- With regard to the concept of current, voltage and electricity, 76% students believed that there is no difference between current and voltage. Current means, current passing on wire that make the light luminous, whereas students unable to give answer for voltage. They think that positive wire should be connected with positive terminal, and negative wire should be connected with negative terminal. Students also believe that if bulbs are not glow then the current returns to the battery. The same findings reveal in the study conducted by Kuchkozer and Kocakulah (2007), Osborn (1983), Yilmaz and Huyuguzel, Pardhan and Bano (2011). Further they believe that the bulbs connected in the parallelcircuit will glow brighter than the bulbs connected in the series circuit. Also their understanding was that if the bulb is very far from the battery, then the bulb glow very dimmer and the bulb is closer to battery will glow brighter.
- 73% of Students misconceptions that light needs air to travel, light cannot travel if there is no air. Theyalso believe that the moon has its own light, they also have the wrong conceptions that objects that cannot absorb light. They believe that only shiny and polished objects reflect light. Also they thinkthat white light (sunlight) what we see is white colour only; they hold alternative conceptions and understanding was that light travels from our eye to the objects so that we can able to see the objects. Also students believe that a shadow always follows us. Students have misconceptions that there is no relation between speed of light and refraction of medium.
- With regard to misconception on heat and temperature, 74% of students respond that heat is

not energy; they said that heat is a substance that flow like water and air in solids. They believe that heat and cold are same phenomena and both are opposite. Heat rises and it always travels upward. Studentsbelieve that all solids expand at the same rate. From this result, it can be infer that student's conceptionon heat and temperature is not adequate.

- 72% of students' misconception was that the force and energy are same and these two terms are used interchangeably. Students responded that when an object is at rest, neither energy nor force act on it. They responded that fuel is energy.
- 66% of students misconception that friction occurs only between two objects; friction only occurs between two irregular objects, if the surfaces are smooth then there will be no friction.
- 77% of students responded that mass and weight are the same things and they are equal at all times. Students believe that the mass is varying from place to place whereas weight is unchanged anywhere. Students believe that air has no weight. Also they believe that gases do not have mass and weight.
- 73% of students holding misconception that the cells continue to grow for ever and the size of the cellsdepends upon the size of the organisms i.e. bigger organisms have bigger cells, and smaller organisms have smaller cells. Also students believe that all the cells including blood cells have nuclei.
- 72% of students believe that the sun rises in the east and sets in the west every day. Also they thinkthat moon can be seen only in night. Students misconceptions was that during summer season the earthis closer to sun therefore we feel very hot in summer, and during winter season the earth going away from the sun therefore we feel very cold in the winter season.
- 74% of students' having misconceptions that melting and dissolving are the same phenomenon. They responded that the ice, salt and sugar will melt in water; few students responded that ice will melt in sunlight. It indicates that the students understanding on melting and dissolve is very limited and shallow, not deep and complete.
- 75% of students holding misconceptions that the bubbles produced during boiling of water are oxygen or hydrogen. They believe that the boiling point for all liquid is same; also the boiling point of water is same everywhere. Further they think that evaporation takes place only in high temperature; evaporation only occurs at the time of boiling of water. They think that evaporation happens only in summer season.
- 73% of students holding misconceptions that sound moves faster than light; another misconceptionthat sound cannot travel in water; also students think that all sound waves are audible; they believe thatsound can travel in empty space too.
- 80% of Students holding misconception that the vapour, mist and fog are the same but the terms are used interchangeably; they responded that fog is made up of water molecules in the

form of gas. They were unable to distinguish between homogenous and heterogeneous mixture. Most of the students believe that glass is heterogeneous mixture. A similar finding was notice in the study conducted by Sheehan and Childs (2013). Students unable to differentiate between elements and compounds.

- 72 % of students having misconceptions that all the acids are danger and it cause injury hence acid should not be touched; acid should be kept only in laboratory. Students do not know how to differentiate acid and base. They were confused about the characteristics and indicators testing of acid and base. They were thinking that acid is bitter taste; they believe that when the blue litmus turns red itis said to be base.
- The findings reveal that 68% of students think that all metals (ex: silver, brass, copper etc) attracted by magnets, also they think that all magnets are made by iron; further they think that larger magnetsare stronger than smaller magnets; They believe that only bar magnet have north and south pole.
- 71 % of students responded that metals are naturally colder than plastic; they believe that plastic is naturally hotter than metals such as iron, steel, aluminium etc.
- The results of the interview with respect to causes of misconceptions reveals that the main cause forthe misconception was student himself because they come to school with several misconceptions constructed by direct observation, experiences, or through parents etc, that may differ from scientific explanations. Students reveals that the lecture method of teaching by teachers also the cause for creation of misconception. They responded that often science teachers do not clarify the concept in detail. Research findings also indicate that misconceptions developed among students due to traditional instructional strategies (Wandersee et al., 1994 cited in Tanner & Allen, 2005). Students opined that some of the concepts described in the text are very difficult to understand hence textbooks also the reason for holding misconceptions, because they rely only the printed textbook to teach and learn science. Students opined that some diagram visualised in the textbook are not attractive and clear. Students are listing teacher's lecture every day, no opportunity to perform hands on experimentsneither in the laboratory nor in the classroom. Science teachers read the contents printed in the textbook and explain the meaning. Over simplification of scientific information and Inadequate learning resources, teacher fails to explain the micro-level concepts that led to creation of misconceptions. Students also responded that language and scientific terminology used in the textbookis difficult to understand because most of the students are tribes, language taught in the classroom and language used in daily life are different hence students face the difficult in understanding the concepts.Similar findings noticed in the study conducted by Herron (1996). It was observed by the investigator that some of the Schools science subjects were teaching by para teachers and untrained teachers, also lack of professional training led to development of misconceptions.

Findings

From the above analysed data, the following findings are drawn out:

Students holding misconceptions that photosynthesis and respiration are same processes and the terms are used interchangeably; they are not fully Understand the difference between respiration and breathing; they stated that all microbes are not harmful, only some microbes such as bacteria are beneficial to human being; the digestion starts in the stomach and end in large intestine. Digestion starts in the mouth and ends in small intestine; the function of the heart is to generate blood and blood cells; there is no difference between current and voltage. Current means, current passing on wire that make the light luminous; light needs air to travel, light cannot travel if there isno air. They also believe that the moon has its own light; heat is not energy, heat is a substance thatflow like water and air in solids; force and energy are same and these two terms are used interchangeably; friction occurs only between two objects; mass and weight are the same things and they are equal at all times; cells continue to grow forever and the size of the cells dependsupon the size of the organisms; moon can be seen only in night; melting and dissolving are the same phenomenon; bubbles produced during boiling of water are oxygen or hydrogen. They believe that the boiling point for all liquid is same; sound moves faster than light; anothermisconception that sound cannot travel in water; the vapour, mist and fog are the same but the terms are used interchangeably; all the acids are danger and it cause injury hence acid should notbe touched; all metals (ex: silver, brass, copper etc) attracted by magnets, also they think that all magnets are made by iron; plastic is naturally hotter than metals.

The main cause for the misconception of the tribal students was they come to school by direct observation, experiences, or through parents etc, that may differ from scientific explanations.

Confusion in conceptual understanding and having incorrect knowledge on scientific concepts. Lecture method of teaching used by teachers also one of the cause for creation of misconception. Sometimes the science teachers do not clarify the concept in detail. Some of the concepts described in the text are very difficult to understand and cope up with the real situations too. Some diagram visualised in the textbook are not attractive and clear. No opportunity to perform hands onexperiments neither in the laboratory nor in the classroom; language and scientific terminology used in the textbook is difficult to understand even in language taught in the classroom and language used in daily life are different to face the difficult in understanding the concepts;sometimes science subjects were teaching by para teachers and untrained teachers due to lack of professional training.

Discussion

The findings show that the overall percentage of students' misconceptions is more than

what thepresent researcher expected.

- The findings reveals that very few students understanding on science concepts was correct, and to some extent partially correct nevertheless most of the respondents holding incorrect understanding ofthe scientific facts, there were several misconceptions existing in students mind with regards to the basic concepts such as photosynthesis, respiration, mass, weight, acid and bases etc. During the interview it was found that most of the students are in the state of confusion in conceptual understanding and having incorrect knowledge on scientific concepts.
- Findings with respect to the concept of heat and temperature, most of the students unable to differentiate these two concepts, they believe that both heat and temperature are the same, students failed to understand that cold is absence of heat. Likewise, students think that all the acids are dangerous, acid will burn human skin, and they were in confusion about the properties of acids and bases in chemistry.
- Students another misconception on light was that, the speed of the light will be the same irrespectiveall medium such as air, water, glass; also they believe that light always need some medium to travel.
- Another misconception that colours are the property of object, when the eyes see the object, it is visible to the eyes, further they think that all objects have the shadow. The results are similar to the results of Feher and Rice (1988), and Anderson and Smith, (1986).
- It can be infer from the findings that students misconceptions mainly originated through daily life experiences, parents, textbook, students irregular attendance to the school, lecture method of teaching, lack of demonstration of science experiments by teachers and poor laboratory facilities, due to difference in usage of language at home and schools, over simplification of concepts,insufficient microscopic explanation of concepts by the teacher, poor quality of visualisation of pictures in textbook, over loaded contents in the textbook, lengthy delivery of contents by the teachers, ineffective presentation of abstract concepts.
- There were many causes of creation of misconceptions; however teachers failed to play a significant role in reducing and removing misconceptions among students. Teachers have not addressed students misconception prior to introduce the new topic. It is always better to identify students' pre- conceptions and misconceptions before proceeding to teach. Also, teacher not adopted any remedial strategies to remove misconceptions. Teacher could follow remediation strategies such as using analogies, refutation based teaching strategy, Concept mapping approach, conceptual change text, problem based learning approach, participative approach, Computer simulation, experiential learning to remove misconceptions. It was suggested by researchers that the above methods are effective to remove misconceptions (Borreguero, et. al, 2013), (Ramesh, 2015), hence such methods should be discarded, it was emphasised in the NCF (2005) to adopt constructivist based approach for better

comprehension. It is suggested that student-centered teaching and learning should be emphasised to active participation and to overcome students misconceptions. Teacher should utilise the available resources in school such as libraries, audio-visual equipment, laboratory facility, computer electronic gadgets, television and other resources to eliminate misconceptions. It was suggested that theabstract concepts can be better explained through visualisation, picture, models, image, animation, and computer based video.

- The medium of instruction also could be according to cultural background of the students. For example: a tribal students use tribal language at home; they observe biotic and abiotic components from the surrounding. They receive the information through senses and their thinking process, cognition and conceptions takes place in tribal language; but when they come to school, the medium of instruction in classroom is different therefore the students may encountered difficulties in understanding the scientific terminologies that leads to creation of misconception. Hence for optimum understanding, Culturally Responsive/Relevant Teaching could be adopted in the

classroom for effective transaction of contents. Teachers also should plan remedial instructions by sparing extra time for learning difficulty students, and to provide additional learning resources in addition to textbook. Worthy (1987) confirms that textbooks contribute for the permanence of misconceptions. Hence good quality of textbook with attractive diagram can be used considerably to reduce students misconceptions. Removing the misconceptions is not just adding the new information into students mind; it is replacing the faulty ideas with scientifically correct knowledge.

- Misconception of student teacher at pre-service level will also possibly transferred to their students, therefore it is necessary to ascertain that student teacher at pre-service level does not hold any misconceptions. Also para teachers should be avoided to teach science; and continuous professional development also required for the teachers to update and remove misconceptions among students. Ofthe many sources, teacher plays crucial role in removing the misconceptions.

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7. Is There a Gender Gap in Equity in Access at Senior Secondary Education in Sikkim?

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Abstract

embedded with the idea of Equity in education. Ensuring access to education, ensuring participation ineducation and providing quality education are the basic benchmark of equitable education. The expansion of equity in educational opportunities has become important for ensuring that all the sections of the society get fair opportunity of access to the school education.

Keywords: *Equity in Education, Access to Education, Participation, Quality Education, Educational Opportunities*

Equity in Education From Gender Perspective

Gender equity in education has been a focal issue in all the policy perspectives around the globe. Women have always been a part of marginalized section of the society and have been alienated from various facilities in the society. Ensuring gender equity in education has become important in the present context as it is the only means to achieve the real ideals of democracy enshrined in the constitution. Gender Equality in Education is directly related to the equality in the labour force which has a significant influence over the economic development of a country. The unequal treatment in education thus has negative impact on the economic development of a country. Our country has witnessed since the decades of miserable life the women were facing. To uplift the condition of women, to change their status in the society and to get freedom for themselves, mainstreaming womenhas become an important area of concern in the education. Girls have been facing the 'silent exclusion'**(Hossain & Benjamin, 2010)**from the schools as it is an undeniable fact that being a girl child from the economically weaker section of the society has always been a double disadvantage for the girls. Researches also reveals that 'girls are more sensitive to the measured school characteristics' **(Levtov, 2013)**It also signifies that the teachers need to be cautious during the classroom instruction.

Demographic Profile of the North-Eastern States of India

As per the Population Census data 2011, Sikkim is demographically the smallest state of our country. The total area being 7096 sq. Kilometres, Sikkim has the population size of 610577. In terms of the average, Sikkim has just a share of 0.05 percent of the National Population. The 2011 census data further reveals the fact that Sikkim is the least populated state among the other North-eastern States of India. The following table shows the demographic profile of the 8 north-eastern states as per the 2011 census.

Table 1- Demographic profile of the North-eastern States of India.

Source: Census of India 2011

With a mere 6.1 Lakh population (According to 2011 Census), Sikkim is the least populated state among the other State of North- Eastern India and share just 0.0502% of the country's Population.

LITERACY RATE IN SIKKIM

The literacy rate in Sikkim is visible as under:

Table 2 – Literacy Rate in Sikkim

Source: Census of India 2011

The Census of India 2011 also reveals that the total literacy rate of Sikkim is 82.2 percent which is much higher than the national literacy rate that stands at 74.04 percent. The male literacy rate of Sikkim also stands higher than the national average as the literacy rate of males in Sikkim stands at 87.3 percent whereas the Male literacy rate at national level stands at 82.14 percent. **The position of female literacy rate in Sikkim is higher than the national average as it stands at 76.4 percent which is much higher than the national average that stands at 65.46 percent in the national level according to the census data of 2011.** The basic inference from the census data shows that that the position of female in Sikkim with regard to Access to education is more equitable than the National scenario.

ACCESS OF INFRASTRUCTURAL FACILITIES

The access of Infrastrural facilities can with regard to gender perspective can be understood throughthe table as under:

Access of girls towards the facilities outside the classroom

The data collected from 15 senior secondary schools in Sikkim reveals that , all the schools haveseparate toilets for Girls. The availability of Drinking water facilities is also

adequate as 14 schools outof 15 have adequate drinking water facilities for the learners. The data also reveals that 100% of theschools have their own playground for the Games and sports and other events to be conducted outsidethe classroom. The grey area in infrastructural facilities is however the common room for Girls as itwas found that only one school out of 15 school has a separate common room for both boys and girls. **Table 4 - Access of girls towards the facilities inside the classroom**

The quantitative data collected from 15 senior secondary schools of Sikkim also highlight that all the schools had adequate furniture inside the classroom. It has also been found that there are functional computers with a separate room and adequate furniture available for both boys and girls. Out of 15 schools 14 schools have laboratories required for the science subjects (Some of them have integrated laboratory for Physics, chemistry and Biology subjects), only 1 school does not have a laboratory. Further, with regard to the audio-visual teaching aids, 53 percent of the schools have audio visual aids inside the classrooms.

Almost all the 15 sample schools have co-education arrangement, thus the access have been looked upon the context of these infrastructural facilities with regard to quantitative data collection.

ACCESS IN EDUCATION AS PER THE KEY INDICATORS

The researchers conducted a qualitative study using the semi structured interviews with the Principals of 10 senior secondary schools of Sikkim. The findings are as follows:

Enrolment

All the heads of the school believed that there is equal enrolment based on gender in the senior secondary level. It was also evident in almost all the schools the girls enrolment was higher than the boys in all the levels of the schooling.

Availability of 'Gender Friendly' Infrastructural Facilities.

It was also evident that the all the Schools have their own 'Pucca Building' with RCC structure. Some of the schools were undergoing renovations. The interviews with the different school heads also revealed that the schools have a good infrastructural facility to cater the needs of a girl child in the school. The concept of 'Gender Friendly School' can be seen in making. The Interviews also revealed that almost all the schools have adequate seating arrangement and space and for the learners, however some of the schools which were upgraded recently from secondary schools to senior secondary schools revealed that they lack adequate seating arrangement for the learners and face the constraintsof rooms.

All the schools have a separate toilet facility for both boys and girls and almost all the schools have asanitary pad vending machine installed are under working condition. In some schools, the students are required to pay a nominal amount of 5 rupees for using the sanitary pad vending machine. Whereas in most of the schools it was informed that the students can use it free. On

the interactions with heads, it was also found that only few schools have a changing room for the girls to be used for the sanitary purposes, whereas most of the schools do not have a separate changing room, however they have a separate toilet for girls.

The problem of a separate common room for both boys and girls were however evident in the schools.it was found that through the interaction with the head of the schools that none of the schools have a separate common room for the boys and girls.

Adjustment of the girl students.

Since only few schools in Sikkim are specifically designated as Girls School, rest all the schools follow the 'co-education' (a common school for both boys and girls), thus it was the need of the research to understand whether the girls feel comfortable in the class and the school as a whole. The semi-structured interview revealed that all the girls are well adjusted in the school, no maladjustment was seen.

Participation of the girl students

It was found that the since the enrolment rates of girls were higher than the boys in most of the schools, the level of participation curricular and in co-curricular activities were comparatively higher than that of boys. It was also found that the girls outshine boys in most of the schools in terms of their academic achievement, which reflects the equitable treatment being given in the schools in the contextof gender.

Conclusion

Ensuring equity in education has become one of the important aspect and is much needed in the present context. Educational equity directly corresponds to various other forms of equity. The study revealed that the Schools of Sikkim have educational facilities for the students. In terms of the Gender equity, both the Quantitative as well as qualitative data revealed that there are facilities available to ensure the gender equity with regard to access in the classrooms. Adequate sitting spaces, proper sanitation facilities, separate washrooms, drinking water facilities are the basic amenities that help the girls for the access and the retention in the schools. Keeping all these aspects into considerations and the context of study, we can infer that there is no apparent problem of gender inequity in Sikkim.

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8. Virtual learning during Current Normal at Undergraduate Level

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Abstract

H.,2005). E-learning opens various doors in higher education. The term "**E-learning** is an on-line education **defined** as the self-paced or real-time delivery of **training** and education over the internet toan end-user device" (Lee & Lee, 2006). "**E-learning** is the delivery of a **learning**, **training** or education program by **electronic means**" (Li, Lau, & Dharmendran, 2009).Several studies have been published on Online learning.

Keywords: *E-Learning, Online Education, Self-Paced Learning, Electronic Delivery, Higher Education*

Introduction: National Centre for Education statistics shows a growing demand and acceptance of online learning (Anawati, D., & Craig, A, 2006). Online learning materials are created with great efforts and also for long lasting uses and it may fulfilled the substitution of classrooms (McClellan,2016). Online teaching increases the scope and accessibility of education (Gossenheimer, Bem, Carneiro and de Castro, 2017). Online teaching has positive and negative both effects on education, therefore teaching learning activities should be more explored to differentiate what works are positive and what are negative (Arroy et al., 2015). Satisfaction, motivation and problem solving and higher order thinking skills are the positive side of Online learning (Matlaka, Nikosi, Modiba, Dolamo & Maboe, 2013). Students satisfaction and retention are also enhance the outcomes of online teaching learning practice (Sophia Janse van Rensburg, E. 2018). Online teaching learning process is highly depended on computer literacy skills with the challenge of internet connectivity. (Barnard-Ashton, Rothberg & Mclnerney, 2017). Interaction between students and teachers has been studied an important part of the online teaching learning process both for students and teachers (Hawkins, Graham, Sudweeks, & Barbour, 2013). Higher classes teachers need to be more responsive and prepared otherwise students become frustrated and they quickly give up the e- classes. (DiPietro, 2010). So the

teachers can be an important part of the entire process (Kirby & Driscoll, 1997). Online learning is also required to develop a set of best practices for evaluating how much an information literacy object follows the best practices for teaching and assessing critical thinking (Goodsett, M, 2020). fourth presence, learning presence, warrants consideration since withoutit areas of student experience in online and blended coursework remain unaccounted for (Blaine, A. M. 2019). Researchers need to pay particular attention to the needs and lived experiences of studentsin these courses (Barbour, 2008). From the student's point of view, e-learning can be used as complementary approach with current system to improving educational quality in agricultural extension and education in higher Education. Yaghoubi, J. (2009). Faculty may contribute to this confusion by claiming that their academic teaching strategies include critical thinking in order to leverage the acclaim associated with the term (Halonen, 1995).

Methods

The methodological approach of this study was an analytical method. Students from Barkatullah University and Banaras Hindu University are the target population that have been selected by using simple randomization method (n=370). Researcher made online questionnaire was developed to collect data. A pilot study was conducted with 100 students in BSSS College Bhopal. Questionnaire reliability was estimated by calculating Cronbanh's Alpha. Data collected were analyzed with the helpof MS Excel. Frequencies, Percent, Means and Standard Deviation were used for descriptive analysis. And t-test were used for interferential analysis.

Results

E-Learning understanding of students:

To know the understanding of E-learning according to student's point of view 370 Reponses were collected. Out of that 40.48% students believe that e-learning is a online learning which was very less as per research team assumptions. Students understanding of e-learning was also 25.91% in live lectures, 12.14 in watching pre recorded videos and 18.62% in by own learning.

Table 1.1 E-Learning understanding of students

It can further be classified into gender wise comparison. Girl students have 7.97% idea about E-

learning, where as 14.2% more girls believe that E-learning is live lectures over internet. 11.66% of
girl students more than boys understand that e-learning is online learning where as 9.3% of boys morethan girls understand e-learning as a learning by own.

Graph-I **Gender wise E-Learning Understanding**

Features of E-learning:

Features of E-learning assessed on four parameters to know the student's perception on Study through e-learning mode provides flexibility during COVID-19 Lockdown, they feel there is no effect of lock down on learning, Availability of Test and Assignment through E-learning and Availability of Interaction between teacher and student through e-mode

Table 1.2 Features of E-learning

Interpretation of the table shows that 61.87% of students agree that e-learning are flexible, location free and availability of interaction and assessment through e-learning mode are possible duringCOVID-19 lock down. Rest 16.99% students are not decided and only 19.05% of students deny the parameter of features of E-learning.

Perceived Ease of Use of E-learning

Researcher main to create this to identify the student's perception and believe on e-learning are user friendly and easy up to which level. And by the below graph it cleared that most of the studentsbelieve that e-learning platform are easy and user friendly.

Graph-2, Perceived Ease of use of E-learning.

On an average 69% students believe that e-learning platforms are easy to handle and helpful to find thenecessary information. Whereas on average 17.26% were undecided and 7.18% were disagree that e- learning platforms are easy to handle and helpful to find the necessary information. The distribution is shown in the below graph.

Attitude towards Using E-learning:

This section was analyzed to know the student's perception about the idea, innovative concept and funwhile using e-learning.

Table 1.3 Attitude towards Using E-learning

Above table proved that maximum students agreed that E-learning is an innovative concept, idea andfun to handle.

Graph-3, Attitude towards Using E-learning.

Objective: To study the difference between male and female student's attitude toward e-learning. **Hypothesis:** There is no significant difference between male and female student's attitude toward e-learning.

Table 1.4 Difference between male and female student's attitude toward e-learning.

Interpretation: Above table shows that at degree of freedom 368 calculated value for't' is 0.075939 which is very less than the table value so the null hypothesis that there is no significant difference between male and female student's attitude toward e-learning is not rejected.

Discussion

This study was set out to analysis the student's perception about E-learning as they are main beneficiaries of E-learning. This study reflected that how student understand its uses and how it helps them in learning during COVID-19 lock down, The perception of male and female respondents on e- learning were also compared with each other. In this study discussion is made on the findings to the following research questions:

What is E-learning in student's perception?

What are features of E-learning according to students?

What is the perceived usefulness of E-learning among students during COVID-19 lockdown?

What is the attitude of students towards E-learning?

There was one objective also to compare the significant difference between male and female student's attitude toward e-learning.

E-learning in student's perception: Understanding of E-learning according to student's point of view 370 Reponses were collected. Out of that 40.48% students believe that e-learning is a online learning which was very less as per research team assumptions. Students understanding

of e-learning was also 25.91% in live lectures, 12.14 in watching pre recorded videos and 18.62% in by own learning.

Features of E-learning according to students: 61.87% of students agree that e-learning are flexible, location free and availability of interaction and assessment through e-learning mode are possible during COVID-19 lock down. Rest 16.99% students are not decided and only 19.05% of students denythe parameter of features of E-learning.

Perceived usefulness of E-learning among students during COVID-19 lockdown: On an average 69% students believe that e-learning platforms are easy to handle and helpful to find the necessary information. Whereas on average 17.26% were undecided and 7.18% were disagree that e-learning platforms are easy to handle and helpful to find the necessary information.

Attitude of students towards E-learning: Maximum students agreed that E-learning is an innovative concept, idea and fun to handle. This also proved that there is no significant difference between male and female student's attitude toward e-learning.

Conclusion

This study was carried out to get the student's perception about E-learning during COVID-19 lock down because in this period of lock down students are only depend on online source of learning. Perceptions were sought from 370 students in which 119 male and 251 were female. This research shows that students believe that e-learning mode is very helpful for the continuing their studies during lock down. The research was done because with the advancement in technology there are various software tools provided to make e-learning possible in an easy manner. The data was collected with the online questionnaire through Google form. The finding of the research shows that majority of students think that e-learning is the better to learn during COVID-19 lock down. Some major findings of the study: In comparison to the males, females are more found to have a positive views and support of E-learning, Maximum students believe that E-learning means Online learning, With the help of different software tools like Zoom, Microsoft Teams, Google Meet etc students find easy handling, this study also reflected that there is no significant difference between male and female student's attitude toward e-learning

Recommendations

Since the COVID-19 lock down increases the scope of E-learning. This will make students to think their teaching and learning activities. Students and teachers will be able to compare the face-to-face and E-learning. This will make students to experience HYBRID LEARNING

(Combination of Traditional And E-Learning) which is their preferable choice of learning as reflected in the study. Researchers also believe that there are some drawbacks of Online learning like Internet connectivity, fears of teachers, Big class strength, Costly etc. In this regards researcher recommended to the educational community that prefer hybrid learning.

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9. Dynamics of Professional Ethics and Indian Higher Education

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Abstract

The status of the teacher reflects the socio-cultural ethos of a society; it is said that no people can rise above the level of its teachers. The Government and the community should endeavour to create conditions, which will help motivate and inspire teachers onconstructive and creative lines. Teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of and the concerns of the community" (Government of India, 1986, para. 9.1).

Keywords: *Teacher Status, Socio-Cultural Ethos, Community Support, Innovation in Teaching, Motivational Conditions*

Professional ethics and values have once again been a topic of discussion among the stakeholders and policy makers of education. The society expects the teaching profession to be role models and, thus, expect them to adhere to 'Professional' ethics and values. This societal expectation is not without reason. The teachers and other faculty, and those concerned with administering the institutions of higher learning in particular have obligations to the society. These obligations are incomparable to those of people in other professions. The society, to put in brief, expects those involved with institutions of higher learning to be role models. The high expectations are justified because, as a group, the institutions of higher learning directly deal with vital human resource, the students. They are highly impressionable and prone to exploitation by several forces to meet their ends. Therefore, thepupils look upon teachers as some sort of role models (Rao, 1999). This article generates some reflections on the policy perspectives on professional ethics and values in Indian higher educationfrom lens of the dichotomy between theory and practice.

Epitomising the Concept of Ethics and Professional Ethics

Before conceptualising the terms 'Ethics' and 'Professional Ethics' an understanding about the

term 'Profession' should be made. Profession is different from occupation. Truly many occupations are designated as profession. An occupation undergoes in its evolution to become a profession. Profession is an occupation, the practice of which requires complex knowledge. A profession is a vocation and it implies acquisition of a fund of knowledge, range of skills and their application in the service of humanity, especially in some specific field. The learned professions may be said to be Law, Medicine, Teaching, etc. A profession is an occupation which performs a crucial social function. To accomplish this function it requires a considerable degree of skill requires a body of systematic knowledge grounded in theory. Ornstein and Levine (2003) identified ten characteristics of a full profession. Theyare:

a) A sense of public service; a lifetime commitment to career, b) A defined body of knowledge and skills beyond that grasped by laypersons, c) A lengthy period of specialized training, d) Control over licensing standards and / or entry requirements, e) Autonomy in making decisions about selected spheres of work f) An acceptance of responsibility for judgements made and acts performed related to services rendered; a set of standards of performance, g) A self-governing organization composed of members of the profession, h) Professional associations and / or elite groups to provide recognition for individual achievements, i) A code of ethics to help clarify ambiguous matters or doubtful points related to services rendered and j) High prestige and economic standing (p. 30).

Therefore, the term 'profession' denotes occupations characterized by certain attributes – a body of specialized and expert knowledge together with a code of ethics emphasizing service to clients.

The term 'ethics' has been derived from the Greek word 'ethikos' which has come from the word 'ethos', meaning character or manners. In practice, ethics seeks to resolve questions of human morality, by defining concepts such as good and evil, right and wrong, virtue and vice, justice and crime. It involves critical reflection on morality, and the ability to make choices between values and toexamine the moral dimensions of relationships. Therefore, Ethics is the science which enables us to understand humanity as it is and humanity as it could be and then instructs us on how to move from reality to the ideal (Sandhu, 2015, p. 48). 'Ethics', a normative science of the conduct of human beingsliving in the society, judges human actions to be right or wrong, to be good or bad. Conduct may include inward activities like motivation and desires as well as outward activities like speech and bodily movements of a person. Ethics tells us not what men actually do but what men ought to do. It describes moral principles, ideals and values which

govern the conduct or behaviour of persons in the society"(Chopra, 2006, pp. 74-75). It can thus be defined as the moral values, rule and standards, governing the conduct of a particular individual, group, profession and culture. Ethics can be termed as the science of character of a person expressed as right or wrong conduct or action.

Professional is a term denoting a level of knowledge and skills possessed by an individual or required of an individual to perform an assignment, that is attained through extensive education and training. Every profession is expected to evolve a set of ethical principles to guide the conduct and behaviours of its members. The ethical principles provide the basis to differentiate between desirable and undesirable professional conduct and behaviour. In several developed countries, such as United Statesof America, ethical standards are enforced through specific mechanisms such as the American Association of University Professors. Professions such as law, medicine, dentistry etc. prescribe their own ethical standards. This is not to mean that in the less developed and developing countries such ethical standards arc non-existent. Almost all the countries are having ethical standards prescribed for various professions (Rao, 1999, p. 2).

As in many other countries, the professional bodies such as the Medical Council of India, Dental Council of India, Veterinary Council of India and the Bar Council of India have code of ethics and the professionals are expected to swear by it. The Bar Council of India has its own a code which is enforced since several decades. For the academic profession as a whole, the All India Federation of University and College Teachers Organisations (AIFUCTO) adopted a note on Code of Professional Ethics in 1976 and the Federation agreed in principle that "in keeping with their noble profession, teachers of colleges and universities in India should observe a code of Professional ethics".

Nevertheless, the society expects the teaching profession to be role models and, thus, expect them to adhere to 'Professional' ethics and codes of conduct. If the conduct of the teacher is not compatible with his professional responsibilities to the students, it must be judged as unethical.

This expectation is not without reason. The Society's expectations from the institutions of higher learning are highland are far beyond the normally accepted norms of behaviour. The teachers and other faculty, and those concerned with administering the institutions of higher learning have obligations to the society. These obligations are incomparable to those of people in other professions.

The society, to put in brief, expects those involved with institutions of higher learning to be role models. The high expectations are justified because, as a group, the institutions of higher learning directly deal with vital human resource, the students. They are highly impressionable and prone to exploitation by several forces to meet their ends. Therefore, the pupils look upon teachers as some sortof role models (Rao, 1999). National Council for Teacher Education (NCTE) clearly reiterated that "It is universally felt that like all other professions, the teaching profession should also have its own Codeof Professional Ethics which indeed is a pre-requisite to ensure its dignity and integrity Increased
awareness of the ethical principles governing the teaching profession is essential to ensure 'professionalism' among teachers" (NCTE, 2010).

Code of Conduct and Code of Professional Ethics- The Dichotomy

The terms, 'code of ethics' and 'code of conduct' have been used interchangeably by teachers and organizations. There are, however, differences between the terms 'ethics' and 'conduct'. Banks (2003)explains that "a code of ethics is usually a written document produced by a professional association, occupational regulatory body, or other professional body with the stated aim of guiding the practitioners who are members, protecting service users and safeguarding the reputation of the profession". The term 'code of conduct' as used by a profession discusses or describes the behaviours of a group. The code sets out principles of action and standards of behaviour, how the members of the group will operate or work (Nuland, 2009, p. 20).

National Council for Teacher Education (NCTE, 2010) makes the difference between the Code of Conduct and the Code of Professional Ethics with example that

"as far as the provision of the Right of Children to Free and Compulsory EducationAct, 2009 is concerned, particularly with reference to Section 24 of the Act pertainingto duties of teachers, enforcement of the Code of Conduct is perhaps the answer. This enforcement is the responsibility of the appointing/disciplinary authority. However, the provisions which define the Code of Conduct could also be incorporated in the Code of Professional Ethics, as making them ethical provisions will always desist teachers from violation of the Code of Conduct (p. 9). In other professions, as for instance, medicine, law, etc. after completion of the professional course, the pass-out is registered as a bonafide practitioner of the profession and is bound by a Code of Professional Ethics relevant to his/her profession. In case of any reported violation of

the code, the authorized professional body initiates disciplinary action which may even lead to cancellation of the license to practice the profession. No such provision exists in the case of the teaching profession (NCTE, 2010, pp. 9-10). It is expected that the code of professional ethics if observed sincerely by the teachers shall enhance their commitment to the profession on one hand and improve their effectivenesson the other.

Over the past few decades, the need for making the teaching profession self-regulatory, by evolving a code of professional ethics for college and university teachers has been articulated from time to time by various commissions and committees on education. Code of professional ethics is essentially a set of professional ethical standards with which teachers are required to comply.

Increased awareness of the ethical principles governing the teaching profession is essential to ensure 'professionalism' among teachers. The Code of Professional Ethics for teachers provides a framework of principles to guide them in discharging their obligations towards students, parents, colleagues and community. Like all other professions, the teaching profession should also move towards self – regulation, which implies that every teacher should have the inner urge to adhere to the ethical principles listed in the Code of Professional Ethics for Teachers (NCTE, 2010, p. 9). Ideally, the Code of Professional Ethics should be prepared by the professional organizations of teachers themselves asit is their responsibility to ensure its observance as a self-imposed discipline on the part of their members.

Educational Implications of Professional Ethics

The prime need of professional ethics is to provide a framework of principles to guide them in discharging their obligations and duties towards students, parents, colleagues, community and society. Professional ethics also help the teachers to act in a professional and ethical manner at all times. By building better teaching and learning environments, these codes contribute significantly to the quality of learning (Nuland & Khandelwal, 2006, P. 18).

Why professional ethics matters most in Higher Education Institutions was been reflected in the Report of the Task Force on Code of Professional Ethics for University and College Teachers (UGC, 1989) that “higher education has to produce leaders of society and economy in all areas of manifold activities with a commitment to the ideals of patriotism, democracy, secularism, socialism and peace, and the principles enunciated in the preamble of our Constitution” (p. 1).

1) Today corruption has spread its roots in education system also due to ethical deterioration in education. To curb the ever increasing corruption, code of professional ethics and conduct

is essential. Professional ethics will fight against corruption and lead to a Hygienic life. Professional ethics helps the teachers to be protected from the unfair and unjust treatment.

2) If the teacher bears good professional ethics in relation to his profession, the ethics are automatically transformed to the coming generations. The deteriorating status of the profession will gain back its potential status through an effective framework of the professional ethics.

3) Professional ethics help in creating cohesion among faculty and staff, and healthy interactions make each one to draw individual benefits and collectively fuel institutional growth. Professionalethics enable the teachers do justice to the roles and responsibilities assigned to them. Professional ethics will also help in the spread of peace and international understanding across the Globe.

4) An effective use of the professional ethics has the power to stop the so called terrorism in the world. Ethical guidelines always help the teachers and academic administrators to improve the quality of teaching. It inculcates the feeling of professionalism among teachers and develops a positive attitude towards teaching profession. Moreover, it promotes public trust.

5) To foster a culture of high standards of honesty, integrity, ethical and law-abiding behaviour among teachers; to enable the teacher to deal consistently and fairly with all students in classroom; to serve as an instrument of self-regulation and to represent a status symbol that protects the profession, professional ethics performs a lot.

Policy Discourse on Professional Ethics for Teachers

Every profession is supposed to have an accepted code of ethics specific to the nature of the profession. Each professional organisation develops a code of professional ethics for its members to adhere to. Professions such as law, medicine, dentistry etc. prescribe their own ethical standards.

These codes of professional ethics vary from profession to profession. As in many other countries, the professional bodies such as the Medical Council of India, Dental Council of India, Veterinary Council of India and the Bar Council of India have code of ethics and the professionals are expected to swear by it (Rao, 1999, p. 2). The Medical Council of India, the Bar Council of India and the Veterinary Council of India have codified ethics codes which are enforced since several decades.

Most of the teachers' organisations in India are regional or institutional in nature. The only two teachers' organisations having a national character at present are the All India Federation of University and College Teachers' Organisation (AIFUCTO) and the Federation of Central

Universities Teachers' Associations (FEDCUTA). AIFUCTO is a much bigger organisation, and unlike FEDCUTA which only represents the Central (government) universities teachers' associations, it represents the very largenumber of State universities and other institutions of higher learning. For the academic profession as a whole, the All India Federation of University and College Teachers Organisation (AIFUCTO) adopteda note on 'Code of Professional Ethics' in its meeting held in Calcutta in November, 1976 and the Federation agreed in principle that "in keeping with their noble profession teachers of colleges and universities in India should observe a code of professional ethics" (UGC, 1986, P. 135).

The Code of professional ethics proposed by AIFUCTO made introductory remarks in the Note that

"The Governments, the universities and college authorities have to create such congenial conditions as would enable the teachers to properly observe the code of professional ethics and give of their best in discharging their professional responsibilities. It should further be noted that some objective code of conduct should be formed for each of the other components of higher education i.e. the university authorities, the college authorities, the Education Department and the Directorate of Education of the Government, the students and the non-teaching staff. Unless these codes are framed and observed simultaneously, observance of a code of professional ethics by teachers in isolation is hardly possible and will fail to yield the desired result
i.e. improvement of higher education (Ibid, 1986, p. 135).

Report of the National Commission on Teachers in Higher Education 1985 (Rais Ahmed Commission Report) pointed out that teachers at higher education in India ought to have some elements as professional groups. They are (1) emphasis on principle (2) rationalism (3) sensitivity to environment
freedom and equality (5) respecting cultural differences and intervention in the making of History. As to professional values the National Commission for Teachers in Higher Education listed the following:

- Acquisition, transmission and addition of new knowledge
- Social relevance of Knowledge
- Extension-organic links with community
- Continuous renovation and innovation with the growing irrelevance of some knowledge.
- Decolonisation of the Third World mind
- Cultivation of excellence
- Importance of freedom to collaborate and work together.

- Importance of. freedom to work together
- Critical awareness and articulation of the tradition
- A social consciousness unafraid to undertake social criticism
- Problem solving approach and emergence of new social order

Moreover, the Report of the National Commission on Teachers in Higher Education pointed out that teachers are more concerned with lower order of Maslow's need that is security value - better material condition, higher salary, promotional facilities etc. It also mentioned the factors repugnant to professional ethics - (i) Earning money by publishing bazaar notes, (iii) Teaching on the basis of notes prepared long ago, (v) Dictating notes instead of teaching, (vi) Giving higher or lower grade by way of favouritism, (viii) Skipping classes without leave, (x) Undertaking tuitions to earn money, (xi) Instigating students against another colleague or group of colleagues.

In this context, the Mehrotra Committee 1986 (Report of the Committee on Revision of Pay Scales of Teachers in Universities and Colleges) also considered what should be the content of a code of professional ethics for teachers. It noted with satisfaction that teachers' associations have been concerned on this point. Obviously, a code of professional ethics will cover an altogether wider context and the teaching community as a whole will have to take the responsibility of enforcing it (UGC, 1986, para. 5.10.3). Regarding the code of ethics, the Committee was obliged to the All India Federation of University and College Teachers (AIFUCTO) for suggesting a model with which it was in general agreement.

Later, University Grants Commission (UGC) in collaboration with AIFUCTO (All India Federation ofUniversity and College Teacher Organization) formed a 14-member task force, which has prepared a code of professional ethics for the University and College teachers (UGC, 1989). The Report of the Task Force on Code of Professional ethics for University and College Teachers adopted by the commission was sent to all the University Vice-Chancellors and College Principals for its implementation. The preamble to the code reiterated that the goal of higher education in our country isto produce leaders of society and economy in all areas of manifold activities, with a commitment to the ideals of patriotism, democracy, secularism, socialism, and peace. Higher education should strive for academic excellence and progress of arts and science. This did not have an adequate section on teachers' rights, but did have a brief statement – "Teachers should enjoy full civic and political rights of our democratic country.

Teachers have a right to adequate emoluments, social position, just conditions of service, professional independence and adequate social insurance" (UGC, 1989, p. 1). The code of professional ethics for teachers in higher education institutions were enlisted in seven parts — (i) Teachers and their responsibilities; (ii) Teachers and the Students; (iii) Teachers and colleagues; (iv) Teachers and authorities; (v) Teachers and non-teaching staff; (vi) Teachers and guardians; and (vii) Teachers and Society as a whole. There were total thirty-eight (38) ideals related to the guidelines for a teacher's professional behaviour. Evidently it was initially conceived as guidance for good practice, with some concern for teachers' rights. In addition to that, this code didn't have any articulation regarding initiating disciplinary action if the code is not adhered to by the teachers in higher education institutions.

This bold initiative on the part of the UGC has by and large remained ineffective even though the National Policy on Education (NPE) 1986 categorically stated that 'the process of introducing discipline into the system will have to be started, here and now, in what exists (para. 7.1.)". This policystatement implies that there is an urgent need to stem indiscipline in the teaching profession. Again the NPE 1986 recommended that "Teachers' associations must play a significant role in upholding professional integrity, enhancing the dignity of the teacher and in curbing professional misconduct. National level associations of teachers could prepare a Code of Professional Ethics for Teachers and see to its observance" (para. 9.3). The code of Medical Ethics evolved by Medical Council of India is also similar except that there is an additional provision for initiating disciplinary action if the code is not adhered to by the professionals (Rao, 1999, p. 4).

UGC is now more concerned with promoting academic excellence, raising academic standards, readiness to reform and innovate by recommending drastic improvement in service conditions, higher pay and professional avenues for personal growth, like new CAS (Career Advance Scheme). The UGCis of the view that by providing a highly motivated package the teachers in higher institutions would be able to inculcate a sense of professionalism among the teachers. Recently, UGC Regulations on Minimum Qualifications for Appointment of Teachers and Other Academic Staff in Universities and Colleges and Measures for the Maintenance of Standards in Higher Education 2010 and 2018 reiterated a code of professional ethics under the domains of (i) Teachers and Their Responsibilities,

(ii) Teachers and the Students, (iii) Teachers and Colleagues, (iv) Teachers and Authorities, (v) Teachers and Non-Teaching Staff, (vi) Teachers and Guardians and (vii) Teachers and Society.Surprisingly, all the regulations didn't mention any disciplinary action if the code is not adhered to by the professionals.

If we look at the school education, we will find a difference in terms of inclusion of mechanism

to dealwith non-observance. The Right of Children to Free and Compulsory Education Act came into force from 1st April 2010. In view of the provision 24(1) of RTE Act, 2009 regarding duties and functionsof teachers, NCTE under the direction of the Ministry of HRD developed a Code of ProfessionalEthics of Teachers (draft) in 2010 in consultation with World Bank, All India Primary Teachers Federation (AIPTF) and some State Governments. This bold initiative on the part of the NCTE has also remained ineffective in terms of operation even after the implementation of the RTE Act more than one decade.

Implementation Issues: Constraints and Loopholes

The codes of professional ethics have been framed, no doubt, with lofty ideals several times for teachers both in school education and higher education institutions in India after independence. But, the crux of the problem is in their implementation. If we scrutinise all the codes, we will notice few constraints and loopholes in the methodology of their implementation. Firstly, the codes of professional ethics for teachers in higher education institutions are silent on procedural mechanism to deal with non-observance. Surprisingly, all the UGC regulations on minimum qualifications for appointment of teachers and other academic staff in universities and colleges and measures for the maintenance of standards in higher education did duly mention code of professional ethics with lofty ideals but didn't attach any disciplinary action taking mechanism if the code is not adhered to by the professionals.

Secondly, the highest apex body of higher education in India, that is, UGC frames codes of professional ethics time to time in consultation with teachers' organizations at national level. If UGC adopts the methodology for implementation developed by the professional bodies such as the Bar Council of India, the Medical Council of India, the UGC would not be able to handle the magnitude ofnumbers amounting to 14.16 lacs teachers working in 39931 colleges and in 993 universities for 3.73 crore students in India (AISHE, 2018-19). The single national level body like UGC has no capacity enough to deal with non-observance the procedural mechanism due to the magnitude of numbers. Thiscalls for establishment of State Councils. The State Councils of Higher Education have been established by some States in India but they do not, as yet, have the responsibility to enforce the code of conduct by law (Rao, 1999). Depending on the type of misconduct and its impact on the academic institution and social fabric appropriate punishments have to be defined.

The other alternative is for the individual institutions to evolve their own codes of conduct. There are so many institutions have evolved codes of conduct but find it extremely difficult to enforce the same. The reasons may be several but the institution's lack of will to enforce the code is the foremost one. In India all the teachers' organizations claim that they are apolitical in nature and teachers' interest and rights are their foundations. In reality, most of the teachers' organizations are developed and backed by political ideology. The political inference with

vested interest within the disciplinary action taking mechanism is totally detrimental to the proper implementation at any level.

In the landscape of Indian education there has been found a gap between policy and implementation. Even though the guidelines based on the Report of the Task Force on Code of Professional ethics for University and College Teachers were accepted for adoption by the University Grants Commission, and communicated to all Universities in the country more than three decades ago, its implementation has not been proper. The NPE 1986 duly reiterated that "teachers will continue to play a crucial role in the formulation and implementation of educational programmes. Teachers' associations must play a significant role in upholding professional integrity, enhancing the dignity of the teacher and in curbing professional misconduct. National level associations of teachers could prepare a Code of Professional Ethics for Teachers and see to its observance" (Government of India, 1986, para. 9.2 & 9.3). Inference can easily be drawn that implementation at any level has not been successful due to sheer lack of will, motivation and commitment among the teaching community, teachers' organizations and policy makers and educational bodies.

Ethics mechanism in institutions of higher learning always centres around teachers and researchers. The Vice-Chancellor of the university, the other administrators, technical and supporting staff, academic administrators in the directorate of education responsible for administration of universities and other academic institutions of higher learning. Moreover, parents, students and local publicrepresentatives are also the people who are involved and play important roles in the administration andfunctioning of the institutions. It is not that teachers alone are responsible for the protection of academic standards and norms of behaviour in academic institutions. Why the others who are involvedfunctioning of the institutions from top to bottom should not be evaluated under the scanner of any code of conduct. Should they also not have codes of conduct? This crucial aspect has been often ignored. Probably, that's why implementation of the code of professional ethics for teachers isconsistently ignored. Top-to-Bottom Approach may be taken for consideration. The other important functionaries of academic administration such as the Deans, Directors of Instruction, Registrars, and Principals and so on should be brought under the code to protect the values and ethics associated with the institutions. Moreover, the students as well as their parents who have an important stake in the functioning of academic institutions should also be bound by code of ethics. The parents particularly should intervene and correct the behaviour and attitude of their wards if they are found to be responsible for disturbing campus peace (Ibid, 1999).

Implementation: Means and Ways

The code of professional ethics should be formulated in cooperation with all the teachers Organisations at national level and must have a sound implementation device with at least three-

tier mechanism at national level, state level and institutional level. After all, the Disciplinary Committees are manned by teachers and their decision related to professional misconduct should be accepted. This concept has to be instilled in the minds of the Teachers by the Professional Organisations representing the Teachers interest.

Another strategy can be adopted to implement the code of professional ethics by using a sound Annual Performance Based Appraisal Methodology under Career Advancement Scheme (CAS) Promotions for Teachers in Colleges and Universities. But the performance appraisal under CAS has no room for evaluation done by students. The National Policy on Education (NPE) 1986 duly hinted at this system that "a system of teacher's evaluation - open, participative and data-based - will be created and reasonable opportunities of promotion to higher grades provided. Norms of accountability will be laid down with incentives for good performance and disincentives for non- performance (Government of India, 1986, para. 9.2). The Task Force Report also reiterated that "The record of evaluation made by the teachers and verified by the institutions will be an open document which should be the basis of recognition of excellence in performance as well as for further improving the overall efficiency of the system" (UGC, 1989). However, peer-review and evaluation by students need to ensure objectivity in this system. The mechanism provides for a valuable feedback assisting in improving the performance of the teachers.

The Governments, political functionaries associated with the running of the Government, administration responsible for funding of universities and the citizens in general should also conform to codes of conduct, the most important of them being non-interference in academic matters (Rao, 1999).

In the proper implementation of the code of professional ethics or code of conduct, teachers need to undergo orientation and deepen their understanding about the gravity of the lofty ideals embedded in the code.

The Code should also contain a section on rights of teachers since in more senses than one, rights and responsibilities are inalienable (A Note by the AIFUCTO, 1976 Cited in the Mehrotra Committee 1986). Code should not contain any section which may curb the creative freedom of teachers. Code should not be a violation of basic human rights.

The institutions governed by codes of conduct and ethics, written or un-written, administered by academicians of repute, enjoying autonomy are not being subjected to political influences and activities of pressure groups are the ideal ones. It is the bounden duty of all the stake holders to stick to code of ethics and prevent degeneration of academic institutions (Rao, 1999).

A code of professional ethics should be developed by professional national level teachers' organization in consultation with institutions of higher education and mechanism evolved for

ensuring its observance. UGC should provide a forum to national level teachers' organizations to develop norms for teacher appraisal, teacher accountability and code of professional ethics and mechanism evolved for observance of the norms.

Successful implementation activities include workshops on ethics and rights of educators, acollectively developed, detailed handbook about the code, copies provided for all teachers, part ofbroader discussions versus isolated discussion of the code, government statements to support the code, and collaboration with national, institutional, local and individual stakeholders (for instanceteacher education institutions, teacher unions, schools, and administration) (Nuland, 2009, pp. 7-8

Concluding Remarks

The rapid developments in science and technology and the challenges of globalization are posing additional challenges to the education system in the country. This is also the time when parental careto the children is on the wane. The adverse effects of the media on the mental development and moral values of the younger generation are being felt increasingly in all spheres of life ... while the education system needs to keep pace with the scientific and technological developments in terms of building the skills and knowledge, it also needs to address the more fundamental issues of the social and moral consequences of such unregulated activities. In this context, there is now a growing demand to lay greater emphasis on education to inculcate, nurture and develop values, particularly among the youth of the country (UGC, 2003).The unique power of higher education in shaping the destiny of individuals, societies and nations is well known. The obligations imposed on the teachers are, therefore, heavy. The Society expects ethical behaviour of highest order from certain sections of citizens. Teachers, researchers and administrators associated with institutions of higher learning are amongst them.

Professional competence is of little value if professional ethics are forgotten. Each University should evolve its own professional ethics after full discussion in the academic bodies and associations and incorporate the same in its Acts, Ordinances and/or Statute, as the case may be, for strict observance by the academic faculty. Self appraisal and regulation are generally the accepted norms for persons associated with academic institutions for maintenance of high ethical standards. The teacher's organisations in India should not always fulfil union type function. They should be more concerned with quality of working life than with issues concerned with profession. The institutions, teachers, students, parents and politicians, worldwide, have a crucial role in evolving ethical standards based on the traditional values and our constitutional ideals. To sum up, it can be stated that like all other professions, the teaching

profession should also move towards self regulation, which implies thatevery teacher should have the inner urge to adhere to the ethical principles embedded in the code of professional ethics for teachers

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10. Preparing teachers for Inclusive classroom: Re-conceptualizing Elementary Teacher Education program in Assam

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Abstract

Inclusive education is more of a practice than a theory or a concept. It is a process of providing qualityeducation to one and all the children irrespective of any discrimination. It is a practice of constant reflection, improvement and change. It demands total involvement of all the stakeholders, teachers, parents and community members to achieve its goal. For which it is highly important to make these stakeholders capable enough to address the challenges of Inclusive education. To provide quality education to all the children the teachers must have a varied range of knowledge and skills to meet the needs to a diverse classroom. Inclusive education in itself is a wide concept encompassing 21 types of disability (RPWD Act, 2016) which requires the teachers to have a wide range of pedagogicalknowledge and skill.

Keywords: *Inclusive Education, Quality Education, Stakeholder Involvement, Diverse Classrooms, Pedagogical Skills*

Introduction

The concept of Inclusive Education first germinated from human right declaration 1948 which ascertains equal right of education to all individual, followed by Worlddeclaration for Education for All in Jomtien (1990) and it was officially discussed at a world platform in Salamanca Conference in Spain in 1994. UN convention on the rights of the persons with disabilities (UNCRPD) 2008 in article 24 has also very finely supported the idea of Inclusive education. In Indian context, the constitution itself provides an equal right to all individual following its preamble of the constitution which starts with 'WE' the people of India. From a policy perspective, the Kothari Commission (1964-66) first suggested that the education for handicapped should not only be on the humanitarian ground but also on utility ground (Kaul,

2014). SSA (2000) has also propagated the idea of Inclusive Education under its scheme universalization of elementary education and zero rejection policy. Making education a fundamental right by 86th constitutional amendment implementation of RTE Act in 2009 makes Inclusive Education more of an urgent need for the presentsociety.

To make the concept of Inclusive Education a reality apart from the other factor the most important one, is to have trained teachers having the willingness to deal with it (NCF, 2005). Since 1994, from Salamanca Statement a number of policies and programs have discussed about the implementation of inclusive education and its related challenges, among them unavailability of trained teachers is one of the major concerns. Teachers in Inclusive Education system need to gauge the effectiveness of their teaching for the range of their students and should know what they need to do to enable each student tolearn as much as possible (UNESCO, 2017).

Right to Education Act (2009) in India has made elementary education compulsory for all the children.This strengthens the beliefs of Inclusive education that no child should be left behind. Earlier to this Universal Elementary Education (UEE) focused on 'Sarva Siksha Abhiyan' SSA (2001) which was responsible for free and compulsory education for children between the age group of 6-14 years in thisprogram also Inclusive Education was at the core (Bansal, 2016). But the failure of this results, because of lack of trained, skilled teachers to address the needs of the class to achieve universal elementary education and to make inclusive education a reality it is important to prepare elementary teachers effectively (Hemmings & Woodcock 2011; Sharma, Shaukat & Furlonger 2014). Winter & Reid (as cited by S. Bansal, 2016) pointed out that many new teachers express apprehension about their ability to teach learners with1 Special Education Needs in mainstream classes and lament that their preparation for inclusive classroom was inadequate. In addition they found that inclusive education is inadequately addressed and often neglected in initial teacher education. The adequate environment is not provided to the teachers to develop their abilities for inclusive setting evenqualified teachers were not prepared to teach in poor school environments and had no experience of doing so during their pre-service teacher education (Valliant, 2011).

The EFA monitoring report estimates that one-third of the 77 million 6-11-year-olds who do not attendschool have special needs (UNESCO, 2007). Miles & Singal (2010) stated that the majority ofstudents with special needs in developing countries do not attend school (Srivastava, 2016). In India, the rate is as given by The Ministry of Human Resource Development (MHRD) survey (IMRB-SRI, 2014) estimate of this figure is 6 million, while for the same year, the National Sample Survey (NSS) figure is 20 million (Bhatty, Saraf & Gupta, 2017).

Teachers in Inclusive Classroom

Efficient teachers are the predicators of an inclusive classroom (Ozekcu, 2018). Inclusive Education is still at its infant stage in Assam and adoption of a new policy by the Ministry does not necessarily mean that teachers will immediately abandon their old ways of practice. In that case it is important to train the teachers well to cater the needs of an inclusive classroom (Ntombela, 2011). It is important for the teachers to understand their role and responsibilities in an Inclusive Classroom. Teachers need to work together and plan effectively for collaboration in the classroom. They need to share their teaching responsibility and work as a team (Kaushik, 2019). Trust needs to be build between the teachers and with the students. For an Inclusive classroom the effective environment is very much important. Also, Teachers' beliefs influence their perceptions, judgment and their behaviors in the classroom (Pajares 1992 as cited by Keppens. K. et. Al., 2019). Thus, the pre-service training programs of teachers must prepare them to develop a positive outlook for an inclusive setup. Because, the ultimate idea of Inclusion is to empower the children in all the means to develop them as a resource for the society and teaching quality is decisive in this (Haug, 2017). The training programs need to give emphasis on inculcating the skills of using varied teaching strategies such as Differentiated Instruction (DI), Individualized Education Plan (IEP), and Universal Design of Learning (UDL). It must be able to prepare the teachers to work effectively and develop collaboration among them in order to create an Inclusive Classroom (Hildenbrand, 2009). Research conducted in this field has established that trained and efficient teachers are an essential for Inclusive Classroom (Ahsan, Sharma & Deppeler 2012; Amr, 2011; Valliant, 2011).

Rationale of the study

In Assam it is seen that large numbers of people live with disabilities and the total dropout rate of CWSN students at primary level was 1.9% in the year 2015-16 (SSA, 2017). Assam is also a state of culturally diverse group of having different ethnicity and culture. So, it becomes important to understand the diversity in the students need and to prepare our teachers as per that. Inclusiveeducation and its broad nature when implemented in the ground level require various pre-requisites to be addressed in order to attain its desired goal.

Teacher education must become more sensitive to the emerging demands of the school system. For this, it must prepare the teacher for the roles of being an encouraging, supportive and humane facilitator in teaching-learning situations to enable students to discover their talents, realize their physical and intellectual potentialities to the fullest, and to develop character and desirable social and human values to function as responsible citizens; an active member of a group of persons who makes aconscious effort for curricular renewal so that it is relevant to changing societal needs and the personalneeds of learners (NCF, 2005). The New Education Policy 2020 also mentions that the pre-service teacher training program needs to be strengthened

in order to achieve Inclusion. Teachers being the instrumental in transforming any policies into practice in the classroom settings required to be prepared in such a way to deal with every possibility and obstacle inside the classroom. In case of Inclusive classroom it becomes more essential for the teachers to be adequately responsive of the nature of inclusive classroom. Therefore, it is important for the pre-service teachers to understand their roles and responsibilities in an inclusive classroom and they must be conscious of the issues and their own concerns related to the implementation of inclusive education. Thus, this paper aims at analyzing

the role and responsibility, concerns about Inclusive Education among D. El. Ed. pre-service student-teachers and also to provide some suggestive measures.

Research questions

- What are the roles and responsibility of the elementary pre-service teachers towards inclusiveclassroom?
- What are the concerns of elementary pre-service teachers for an Inclusive set up?
- What are the different ways to prepare elementary teachers for an Inclusive classroom?
- **Objectives**
- The objectives for the present study are as follows:
- To identify the role and responsibilities of elementary pre-service teachers for Inclusive classroom.
- To analyze the concerns of elementary pre-service teachers for an Inclusive setup.
- To provide suggestive measures to prepare elementary teachers for inclusive classroom.

Methodology

Research Method

For the present study researchers have followed descriptive research method. This method isconcerned with conditions or relationship that exist, practices that prevail, beliefs, points

of view orattitudes that are held processes that going on, effects that are being felt or trends that are developing. **Sample and Sampling Technique**

In the present study total sample constitute of 150 Pre-service student-teachers from two DIETs of Assam namely DIET Tinsukia and DIET Sonitpur. From Tinsukia and Sonitpur DIETs a number of 70and 80 student-teachers have been selected respectively through simple random sampling technique.

Tools of the study

In the present study self-developed semi-structured questionnaire and interview schedule were being used for the collection of data.

Procedure of data collection

The researchers have collected primary data from the participants by visiting personally to them. Permission is sought from the principal of the DIETs then the researcher visited the DIETs, 75 pre- service student-teachers from each DIET are selected randomly from the final year D.El.Ed students. Questionnaires were distributed among the respondents and for conducting the interviews proper placehave been selected and the interviews were taken considering the consent of the respondents.

Findings and discussions

Objective 1: The Role and Responsibilities of Elementary pre-service teachers for Inclusive Classroom.

Findings: The findings of the study reveal that most of the pre-service teachers are aware of the term Inclusive Education and as per their understanding they realize their role and responsibility in an inclusive classroom (Bhatnagar & Das, 2014).From the responses given it is found that the pre-serviceteachers identify their role and their responsibility for an Inclusive Classroom as-

Table no. 1: Role of Teachers in Inclusive Classroom

Discussion: The results from the findings show that the pre-service student-teachers realize the value of providing support to the students, impartiality and non-discriminatory attitude as their core responsibility in Inclusive Classrooms (Nandini & Taj, 2014). From the findings it is understood that the student-teachers to some extend understand the principle of Inclusive Education but there is lack ofclarity in the basic concept of Inclusion. This could be the result of less emphasis on inclusive Education in their courses (Sharma, et. al, 2008). If the student-teachers are given some exposure to meet and work with the disadvantaged group it help to

develop a positive attitude among them for inclusion and will consequently transform their behavior too towards the students with disability and inclusive classrooms (Sharma, et. al, 2009). Teachers need to be confident in assessing, analyzing, planning and practicing, evaluating and reflecting the teaching practices and activities (Florian & Linklater, 2010, p. 370 as cited by European agency, 2005). Some of the student-teachers are not very clear about the concept of Inclusive Education hence their view about their role in inclusive classroom is somewhat vague in nature.

Teachers are the instrumental in creating an Inclusive Classroom. Their participation and active engagement is of utmost importance in providing quality education to children in Inclusive classroom settings. Teachers are required to create an environment inside the classroom where the every children feel welcomed and classroom management skills for making it a place where the children feelwelcomed (Stronge & colleagues, 2007 as cited by Piten cat, I. M, et. al, 2018). Collaboration and innovation in the teaching practices is also desirable attributes of an inclusive class teacher. Besides teaching providing counseling and emotional assistance to the students are also major roles of teacher in Inclusive classroom (Kuyini, Desai & Sharma, 2018).

Objective 2: The Concerns of Elementary pre-service teachers for an Inclusive setup.

Findings: The pre-service teachers from their understanding about Inclusive Education have pointed out certain concerns about an Inclusive setting in schools as discussed here-

Figure no. 2: Concerns of Pre-service teachers on Inclusive Education

Discussion:

Management is found to be one of the major concerns of the pre-service teachers. From the findingsof the study it is found that the participants have various concerns regarding the management and implementation of Inclusive Education in the schools. Some of the participants have responded as "it would be difficult to manage diverse group of students in the school within the limited resources available to us". The pre-service teachers are also concerned about increase work load on the institution as a result of inclusion. The respondents believed that increase of workload and time management could be a constraint while practicing inclusion in reality (Sharma, et. al, 2009; Round, P.N, et. al, 2015).

Poor infrastructure is another major concern indicated by all the respondents for an Inclusive set-up

(Bhatnagar & Das 2014; Sharma, et. al, 2009; Shah. 2005 as cited by Bhatnagar and Das, 2014). It is one of the most essential components of creating an inclusive classroom to provide

the children minimum basic facilities to be in the school.

Classroom management again is also a leading concern for the pre-service teachers as they are not being trained in such a way to manage and control the inclusiveness inside a classroom. The respondents have also mentioned that a diverse group in the classroom would lead to mismanagement inside classroom as they are not very well prepared to handle both physical and social diversity in theirclassrooms (Sharma et al., 2009).

Lack of knowledge about handling the behavior of the students such as with Autism and Attention Deficit Hyperactive Disorder is another major concern mentioned by the respondents (Sharma, et al, 2009). It was revealed from the findings that they are not well informed and aware about the various methods of teaching and assessment techniques for an inclusive classroom.

Curriculum which is not inclusive in nature also creates concern among the pre-service teachers in terms of delivering it in the classrooms (Sigafoos & Elkins 1994; York & Tundidor 1995). The same curriculum does not address the varied need of the students. One of the respondent mentioned that "making students from different socio-economic background to sit in the same classroom may also create differences among the students". Curriculum must be able to fulfill the needs of the students in an inclusive classroom (European Agency for Special Needs and Inclusive Education, 2015).

Language diversity as responded by some of the participants in their classroom is a concern for them.As per the diversity in the language group among the students raises concern among the pre-service teachers to address their socio-emotional needs and establish communication with the students.

Objective 3: Suggestive measures to prepare elementary teachers for inclusive classroom

Numerous researches and documents have stressed on the point that Teacher Education is an importantcomponent of making education system an Inclusive one (Sharma, et al, 2009; Florian & Becirevic 2011; NCERT 2006). There are lot of issues and concerns related to preparation of teachers for an inclusive classroom. Here on the basis of the findings of study the researchers are providing certain suggestive measures for the preparation of teachers

Teacher Education

- The pre-service teacher education programs should be made more inclusive in nature in termsof its curriculum, teaching practices and philosophy.
- The management should design and organize the activities in the institutions by keeping aninclusive setting in mind not as a part of it.

Classroom management

- Developing ability among the pre-service student teachers to manage and address diversity ofthe classroom effectively.
- Developing collaborative skills among the student teachers.

- Providing opportunities to the student teachers to engage with the students with needs.

Pedagogy Skill Development

- Organizing workshops and awareness programs to sensitize the pre-service student-teachersabout various types of disability and strategies to manage them inside the classroom.
- Providing knowledge about Inclusive Pedagogy.

- The pre-service teachers should be trained such effectively that they become efficient increating an inclusive classroom with the basic minimum facilities available to them.

Curriculum

- The curriculum of pre-service teacher education should also be designed in such a way so itprepares the teachers very smoothly for an inclusive classroom.
- The classroom activities should also involve inclusive component in it.

- Asking the students to prepare lesson plans by keeping in mind an inclusive classroom.

- It must develop a sense of responsibility and shape the perception of the student-teacherstowards inclusive education.

Teacher Educator

- The teacher educators must be able to use inclusive teaching strategies in their classroom.

- Various workshops and training programs should also be a part of the training program todevelop positive attitude among the teacher educators.

Conclusion

Inclusion being a worldwide movement cannot be accomplished without a strong and skilled

workforce i.e. trained teachers. Teachers act as an essential component in the process of inclusion. There is an important need to make the pre-service teacher education conscious and prepared to make the student-teachers best prepared to meet the need and demands of the students with disability in the school settings and outside. In this study attempt was made to understand from the pre-service student teachers about their perceived role and responsibility towards an inclusive classroom. The concerns of the pre-service student teachers towards inclusive education and to provide some suggestive measures has been provided by the researchers to make the teacher education program more inclusive so that they can prepare students who can deal with an Inclusive classroom very well. With all the policies, programs and legislations supporting inclusive education it becomes necessary to prepare teacherswho have ardent interest in working with students with disability and in inclusive environment.

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11. From NPE 1986 to NPE 2020: A Reflection

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Abstract

India has made significant progress in providing access to education at different levels through the introduction of a large number of initiatives like SSA, RMSA, RTE and so on. Despite all these interventions, India has not been able to provide basic elementary education to all children even after adecade. In such a scenario, hoping NPE (2020) to achieve universal access at all levels of education with 100% GER in school education by 2030 is going to be one of the most difficult tasks. Most importantly, the real challenge is not just the access to education but to ensure the access to quality education. The focus, right from SSA & RTE to NPE, seems to be more on physical access rather than quality. Its high time that quality should be given a central place in the plan documents as ASER reports and National Assessment Survey (NAS) reports, have for a very long time been raising alarm on the deteriorating quality of education where it seems like India is on a downward spiral.

Keywords: *Access to Education, Quality Education, Educational Initiatives, Universal Access, National Policy on Education.*

Introduction

Ithas also been pointed out that India accounts for 21% of the world achievement gap for quality education goals (Bhowmick, 2019). This itself is a reason strong enough to work towards inculcating quality while putting emphasis on access.

NPE (2020) has accorded immense weightage on the role of technology for the transaction of teachinglearning. Unfortunately, the success of conducting classes with technology or assuring the blanket usage of smart classrooms, has both been a distant dream without adequate infrastructural support. Theinequitable access to technology has emerged as one of major challenges in the current pandemic situation. Added to that, the preparedness of students as well as teachers in effective handling of the technology, is in itself questionable. With the free flow of knowledge and information in several socialplatforms, NETF might emerge to be yet another

dormant organisation, with no significant value addition. Along with the pessimism of not contributing enough to add towards the marginal utility in education, there is fear of digital divide which may soon pop up with an increasing shift towards technology-oriented learning, not to forget the impact which the same may have on women and other vulnerable groups.

Education for equality held a strong foothold in NPE (1986). It talked in depth on how education will act as an agent for women equality, equalisation of SC, ST and other educationally backward sections of the societies like minorities, handicapped and so on, to remove disparities. These are the democratic ethos of India, which needs to be inculcated and reflected overtly, without bargain. NPE 2020 though tangentially touches upon these aspects however, the clear-cut roadmap with plans and strategies are still awaited on how these aspects will be dealt with, other than budget allotment, which is a mere starting point.

With regards to the regulatory and structural changes, NPE (1986) focussed on the strengthening of existing institutions by providing infrastructure and human resources. However, NPE (2020) goes for introducing separate regulatory and management authorities like SSSA, SQAAF etc. But finding a solution by simply replacing and bringing forward a large number of new authorities might add to an already existing chaotic system and thus the real problem remains intact. The already existing systems need to be repaired through adequate training, capacity building and adequate funding.

For skill development, one of the reforms introduced is the inclusion of vocational education from class 6. The already existing vocational education at secondary level's impact on the income and employment prospects is not hidden. The real need is to fix the existing issues and not to extend to other stages without adequate planning and infrastructure. It should be planned in realistic terms in order to avoid mismatch between skills and market demand. Along with that, the inclusion of coding and other vocational training from class 6 onwards will require recruitment of fresh human resources into the system who are adeptly skilled to tackle this reformed system. Teacher's recruitment is one such pandora's box where the less is said, the better it is. Other than intrinsic motivation, which is inherently fuelled by workplace ethos and culture, what other factors should attract the fresh talent in the education system!

To transform the imaginary situation into real, it is important to have certain checkpoints which includes policy desirability by stakeholder, affordability in relation to the fluctuating economic situation and most importantly, sustainability to bear fruit. The interest groups, notably teachers, parents, and other administrative staffs can lead towards success or failure of policy as reforms are to be implemented by them.

The most important phase is the policy implementation. The administrative authorities are in charge ofthe duty to implement the plans at ground level. But the lack of clear-cut division of responsibilities between teachers and administrative staffs, make the entire system standstill.

The system reaches a dead end where the task becomes 'nobody's responsibility' Take for example, a teacher who is involved in administrative works so much that the real role of teaching gets lost. This gap of executingadministrative work by a teacher need to be addressed. Teachers play a major role in the education success. NPE (2020) called for motivated, energized and building the capacity of faculty. It is suggested that there will be independent, transparent recruitment and more freedom to design curricula, incentivizing excellence. But there is nothing new in it. Even three decades before 1986 policy also called for reorganizing recruitment to ensure merit, objectivity along with creating conditions to motivate teachers through giving them freedom to innovate etc. The real challenge is to transform this abstract intention to a concrete implementation. Take another example of Teacher education institution. TEIs poor quality have been highlighted by JVC (2012) and even NCFTE 2009 which elaborates on concerns and vision of teacher score, and called for revampingteacher education. On the similar lines, NEP (2020) again repeated that strict action will be taken. But these strict actions have still not been concretized in practical terms.

Inclination towards privatisation is yet another aspect which is clearly visible in NPE 2020. The policy document has in fact encouraged the private philanthropic partnership. At higher education levels, it seems that the government is prepared to privatize the HEI under the veil of financial autonomy, where on one hand, the HEIs will be expected to generate their own income, on the other hand, as per policy, they will be encouraged to offer a large number of free ships and fellowship to students. Expecting them to offer scholarships along with generating their own source of income sounds a bit fictitious.

The idea of financial autonomy does align well with the reduction of public funding in education. It's no more hidden that the current government has reduced funding on education in the past few years. The public spending on education was 6.15 % of the central budget in 2014-15 which reduced to 3.71

% in 2017-18 (GOI, 2018). As per Economic survey 2019-20, the public spending on education was 3.1% of GDP which is considered lowest in the decade. Even the GEM (2017-18) report quoted the insignificant spending on education. With all these backgrounds of ever dropping public funding in higher education, along with the blueprint to further dissociate oneself from accountability of funding, it is rather idealistic for NPE (2020) to proclaim the increase in investment by 6% of GDP. Along withbeing deceptive, it is rather shameful that even after 5 decades of Kothari commission, we are still just planning to reach the 6% mark, where the actual investment, as per the current economic environment and significant increase in the demand for education, the new higher level of investment should have been estimated and implemented.

An interesting aspect of the policy document is the assessment reforms which talks about 360-degree holistic progress cards and tracking student progress for achieving learning outcomes.

But the major thing to notice is how it will be practiced at ground level and how far the stakeholders, especially teachers, are prepared for it. The method of evaluation will make it easier for students to score high but its implications on quality need to be reworked on. This is a matter of grave concern, given the factthat we have already implemented continuous and comprehensive evaluation (CCE) under RTE, and the same has been withdrawn as well for the lack of effective results.

Conclusion

NPE (2020) was the much-awaited policy document to reform the education system in context of newly emerging challenges. However, NPE (1986) is still considered to be a benchmark and revolutionary document which envisioned the inculcation of democratic ideas in the education system along with ensuring the quality of learning with a child centred approach of learning. It encompassed the short- and long-term targets to be achieved within a specified period of time. However, the present policy document of 2020 seems to be incomplete without the targets. The current document presents an idealistic world of education fuelled with the ornamental language. How far it will be able to address the goal of access, equity, efficiency needs to be looked at in the coming span of time. Taking into consideration the ground level realities, there are still a number of issues that are unaddressed.

The gap between the policy announcements and implementation is one of the major reasons behind any policy failure. Moreover, the preparedness of stakeholders for implementation is a daunting task. Another concern which emerges from different aspects of the policy document is its repetitive nature. As the saying goes 'old wine in new bottles', we already have experienced the implementation as well as withdrawal of certain policies like CCE, Four Year Undergraduate Programme, Technology enabled learning etc. With experience of failure, the next logical step for any rational individual wouldbe to revamp the same for betterment, having observed the impact in the education system. But the policy document brings forth those policies once again, not in revamped form, rather in an extended format, to be implemented across India.

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12. Impact of gender and opposite sex companion on social and emotional adjustments among college students in Manipur

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Abstract

There are gender differences in social functioning and adjustment as boys are more aggressive and faced more hindrance in social and school performance [2] and they are of the opinion that social relationships, from both within and beyond the family start exerting influence in the adolescents' developmental stage[4,8,17]. On the opinion whether perceived emotional intelligence is a predictor of psychological adjustment in adolescents, it is found that adolescents who score more in attention to feelings but score low in emotional clarity and repair, exhibit deficient psychological adjustment concretely, higher levels of anxiety, depression, and social stress and lower levels of general mental health.[14]illustrates that gender and opposite sex companion of the college students have a great role towards the regulation of their social as well as emotional adjustments.

Keywords**:** *Gender, Opposite sex companion, Social adjustment, Emotional adjustment*

Introduction

Many scholars define the word 'adjustment' in their ways of understanding: the process of modifying one's behaviour in changed circumstances or an altered environment in order to fulfil psychological, physiological, and social needs[18]; the process of searching for and accepting modes of behaviour suitable to the environment as well as the changes that can come up in the environment[5]; theprocess in which an individual attempts at satisfying his needs in light of environmental pressures as well as the person's abilities and limitation [7]. In short, it is often referred to as the process of adaptation to the surrounding environments. It has many dimensions of adjustment out of which socialand emotional adjustments are also inevitable ones. The former adjustment refers to the adaptation in social relationships with other people; while the latter is the adaptation depicted by an individual in hisor her relationships with other people as well as with himself or herself. Both of them are mostly reflected in the individual's attitudes and

behaviour. Such elusive inherit human behaviour is believed to be influenced by several confounding factors like psycho-physiology activities, socio-demographic factors, and cultural milieus of the society.

The situation is more pertinent to adolescents, especially college going students, as they need to take part in various social activities in their socialisation process. They are deputed with several social roles and given social trainings usually by elders, parents, teachers, or any members of the society through interaction and communication. Indeed, their adjustment increases when they are able to cope with social roles and various situational problems in their life. In this regards, earlier works have mainly focused on peer relationships, academic achievement, and psychological adjustment ofthe child.[2]There are gender differences in social functioning and adjustment as boys are more aggressive and faced more hindrance in social and school performance [2] and they are of the opinion that social relationships, from both within and beyond the family start exerting influence in the adolescents' developmental stage[4,8,17]. On the opinion whether perceived emotional intelligence is a predictor of psychological adjustment in adolescents, it is found that adolescents who score more in attention to feelings but score low in emotional clarity and repair, exhibit deficient psychological adjustment concretely, higher levels of anxiety, depression, and social stress and lower levels of general mental health.[14]

In the contemporary society, adolescents are introduced to many modern technological amenities and facilities which sometimes can interfere with their social life and creates adjustment problems. Very often, they themselves are at that stage of life where confusion reigns. The student's inability to adjust to environmental changes, their inappropriate course choices, personal issues, and financial constraints are some of the symptoms of the students withdrawing from studies.[3] Thus adjustment to college environment is essential to have positive college outcomes.[12]

Such changing scenario of adolescents towards the adjustment behaviour is not an exception in our country, India in general and Manipur in particular. In Manipur, such alterations become a big social issue as such human behaviour is attributed with psycho-physiology activities, socio-demographic factors, and cultural milieus of the society. In spite of urgent necessities of the in-depth studies en route to understand the way college students adjust to their immediate surroundings, no work on the subject has so far been taken up in this tiny state of Northeast of India. Hence forth an attempt is made in the article to assess the impact of gender and its opposite companion on the adjustment of social and emotional levels of college going students of Manipur.

Materials & Methods:

The present study is based on a primary sample of 1071 college going adolescents of Manipur; out of them 369 are boys and 702 girls. The sample size is estimated on the prior information

i.e., mean ± SD = 23.88±16.04 of adjustment dimensions [9] with an allowable error of 0.96 to mean at 95% degree of precision. The sampling technique adopted for the purpose is so called Two-stage Sampling: in the first stage, Simple Random Sampling is used in selecting seven colleges out of the total colleges scattered within the Imphal city; and in the second stage, Proportional Allocation is made by selecting 20% out of the total strength from each selected college. A well-validated Adjustment Inventory for College Students (AICS-SS) with five points Likert scales, developed by Sinha and Singh [15], is administered as tool of the study. As a survey technique, Personal Interview Method was administeredduring 2018-2019, considering only those who were willing to participate. For the purpose of the study, the two adjustment dimensions – social and emotional – are taken as respond variables while gender and opposite sex companion as predictor variables.

After thorough scrutiny and diagnosing the data, statistical analysis was performed by using SPSS Statistics Version 21. For the comparison of two mean scores for each adjustment between genders, Independence Sample t-test, commonly known as unpaired t-test is used while of three mean scores for each adjustment among opposite sex companions, F-test, commonly known ANOVA is applied. To establish association of adjustment classification with the predictor variable, $\square^2$–test is used, and finally Person's Correlation Coefficient 'r' is advocated to establish correlation between social and emotional adjustments. All comparisons are two-sided and the P-values of < 0.05, < 0.01 and < 0.001 are taken as the cut off values for significant, highly significant and very highly significant respectively.

When total sample is classified into the five adjustment classifications, there is a significant variation of the social adjustment between boys and girls (P<0.001), in the sense that boys have higherpercentage of his score in excellent, good, average and unsatisfactory than that of his counterpart though she has higher percentage in very unsatisfactory. A certain varied adjustment pattern over the three categories of opposite sex companion is also persisted as evident by a highly significant P<0.001.Thus as seen in gender, the boys who have girlfriends have higher percentage of their numbers in excellent, good, average and unsatisfactory than that of his counterpart girl who have boyfriends, though they have higher percentage in very unsatisfactory adjustment category.

Table-4

Emotional adjustment classification-wise distribution of casesaccording to gender and its opposite companion

$\square^2$ –value; df: degree of freedom; P-value: probability due to chance factor

Nobody accomplish excellence in emotional adjustment classification in the sample and thereby only four classifications are considered here. Analogous to social adjustment classification, in emotional adjustment classification a highly significant variation ($P<0.001$) persists between boy and girl students in the sense that boys have maintained higher percentage of their numbers in good, average and unsatisfactory while obviously girls have higher percentage in very unsatisfactory. In caseof opposite sex companion, the boy who have girlfriends have higher percentage of his number in good, average and unsatisfactory whilst girls having boyfriends have higher percentage in very unsatisfactory emotional adjustment classification. The pattern is very highly significant statistically($P<0.001$).

Discussion:

The results arrived, based on the primary sample of Manipur, reaffirm that the girl student has certainly better social as well as educational adjustments than that of her male counterpart. At the sametime those girl students who have boyfriend have significantly well adjusted while those boys who have girlfriends less adjust socially as well as emotionally. In Manipuri society, females have more active participation in socio-economic and cultural activities, eventually their status is treated high in the society; and thus perhaps they might be making better social and emotional acceptance. The present findings are in conformity with the prior research findings[10,1,13] that have shown significant gender differences in the social adjustment of the students where girl students show better social adjustment than her opposite gender. In brief, boy students seem to lag behind their girl counterparts. On the contrary, some scholars [16,11,6] reported that boys perform better in adjusting socially and emotionally than that of the girls. These contradict findings may perhaps be due to the differences of mainly gender perceptions and socio-cultural structures attributed to the societies where the studies were conducted. As evident, the results also reveal there is a very highly significant direct correlation between actual score of social adjustment and actual score of emotional adjustment ($r=0.435$). In otherwords, those students who are having good social adjustment usually have good emotional adjustment, and vice-versa. On examined further on the number of frequencies on the adjustment classifications, the results highlight that the percentage of cases between genders as well as among the three types of opposite sex companion are certainly varied over the five social adjustment classifications – excellent, good, average, unsatisfactory, and very unsatisfactory. Likewise, the percentage of cases between genders as well as among the three types of opposite sex companion is also definitely different over the four emotional adjustment classifications. These adjustment classification findings are also in agreement with the findings of erstwhile actual adjustment scores.

Conclusion

Adjustment is an inherent human behaviour but it might be varying with several psycho-physiology activities, socio-demographic factors, and cultural milieus of the society. It might also be playing a greater role in the adolescents towards social and emotional alterations. Along these very sensitive human behaviours and insightful perceptions, an attempt is made in the present study to determine the influence of gender and its opposite companion of college going adolescents on the adjustment of their social and emotional levels. The results reaffirm that the girl student has certainly better social as well as educational adjustments than that of her male counterpart. At the same time those girl students who have boyfriends are significantly well adjusted while those boys who have girlfriends have adjusted less socially as well as emotionally. Again, the results show a very highly significant direct correlation between actual score of social adjustment and actual score of emotional adjustment (r=0.435). On the other hand, the percentage of cases between genders as well as amongthe three types of opposite sex companion is certainly varied over the five social adjustment classifications – excellent, good, average, unsatisfactory and very unsatisfactory. Similarly, the percentage pattern of cases between genders as well as among the three types of opposite sex companion has also changed over the four emotional adjustment classifications (excluding excellent). The results arrived might be quite interesting and useful ones academically which may contribute suchinformation on the social and emotional adjustments among college students in Manipur, a tiny state of Northeast India to some extent.

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