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CONTENTS

An Analysis of the Level of Use of ICT Components in Teacher Education Programmes in Mizoram in the Light of the National Curriculum Framework for Teacher Education

Gloria Lalchhanhimi*
R.P. Vadhera**

Abstract

Technology needs to be carried inside the educational field. It is not only in the developed countries that technology has its impact. Even in the far most corner state of India like Mizoram, one can see smart-phones in the hands of small vegetable sellers, leading to a great pressure for teaching young people about Information and Communication Technology, how to use it in an effective manner and bring it in the educational context. Schools have to become compatible to the ever expanding knowledge of the world and also be equipped with the technology to deal with this knowledge. For this to be accomplished, teachers themselves have to equip themselves to deal with what technology has to offer. Realising this, the government has seen to the installation of ICT in teacher education programmes. However, ICT is fairly new in teacher education programmes. Therefore, the present study was conducted in order to find out the trues status of ICT education in the teacher education programmes. Two of the most senior DIETS were chosen, i.e., Aizawl and Lunglei DIETS. It was found that Aizawl DIETS was much better equipped than Lunglei DIET. Furthermore, the study also yielded a few intereting results regarding the use of ICT in teacher education programmes in the state.

Keywords: *ICT components, Teacher Education Programme, National Curriculum Framework.*

Introduction

Technology plays a very important role in the daily routine of the world; in fact, the whole world depends on it. Spending a single day without technology would be a

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very challenging thing to do, even impossible for people in the city. There are thousands of software applications, which do all the person's job to accomplish a task.

The quality of education constantly requires improvement. Every nation, every education system gives effort for a good quality education. The contributing factor for an effective teaching learning process is communication. The traditional method of communication in the classroom, i.e. the lecture method where the teachers do most of the talking, may sometimes be effective for particular situation, but cannot always be; they however require more time and a very good communication skill. Great inventions are made during this past decade; technologies can substitute a wide range of things, things that require a great use of manpower, time and money.

Rationale of the Study

The world is undergoing a transformation as a result of the continuous development of communication and information technology. Technology occupies a great significant place in all developments; creating a strong impact on society. It also has a great impact on the educational system as well. New gadgets of technologies such as laptops, notebooks, tablets, smart phones, smart TV, smart TV, smart boards, etc. are coming up at an accelerating pace. The implementation of these new educational technologies in the class will help to shift focus from teacher-centered education to student-centered education. Integrating ICT at primary school level is a great foundation to grow from, since technology is getting more advanced day by day and there is a crucial need of teachers with the right skills to use it.

According to the National Curriculum Framework for Teacher Education (NCFTE 2009), the critical need of use of technology in schools lead to the necessity of the use of ICT in teacher education programmes. ICT in schooling as well as e-learning becomes centre-stage in the Curriculum Framework and thus it was stated that concerns and vision underscoring that teacher education and school education have a symbiotic relationships and developments in both these sectors mutually reinforce the concerns necessary for qualitative improvements of the entire spectrum of education. The framework obligated the use of ICT in teacher education programmes. By taking this background into consideration it is the utmost need of the society for conducting a research in the field of use of computers and computer aided technology or information and communication technology in teacher education programmes in Mizoram.

Delimitation

Due to time constraints the study was conducted in Aizawl DIET and Lunglei DIET only.

Objectives of the Study

1. To study the ICT components in elementary teacher education programmes in Aizawl DIET in the light of the National Curriculum Framework for Teacher Education.
2. To study the ICT components in elementary teacher education programmes in Lunglei DIET in the light of the National Curriculum Framework for Teacher Education.
3. To study the infrastructure of the two DIETs.
4. To study the level of use of ICT infrastructure in the two DIETs.

Methodology

Since the investigator was interested in exploring the status of ICT infrastructure and the level of use of ICT, therefore, she decided to employ the descriptive method that generally describes and interprets the existing conditions or relationships. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions.

Besides the descriptive method the investigator also used the content analysis method /technique for analyzing her qualitative data relating to the first and second objective on examination of ICT components in elementary teacher education programmes in the DIETs.

Tool of Data Collection

Keeping in view the objectives of the present study an Information Schedule and Checklist to examine the condition of the ICT infrastructure of the DIETs was developed by the researcher.

To examine the ICT infrastructure and level of its use in the sampled DIETs (Objective no. 3 and 4), an information schedule-cum- checklist consisting of 8 questions was developed by the investigator with due consultation of the relevant literature, and discussion with experts and supervisor. Besides, the scholar had maintained her field journal for recording significant observations relating to ICT infrastructure.

Administration of Tools and Collection of Data

In this study, all the tools were self-administering scale. The investigator personally visited both DIETs. The information-cum-check list on ICT infrastructure was given to the Principals for eliciting the required information.

Sources of Data

The scholar has used both primary and secondary sources of data for collecting relevant information for the realization of the objectives of her study.

1. Secondary Sources:

The data relating to the first objective i.e. examining of ICT components in elementary teacher education programmes in the DIETs under study was collected from booklet on Curriculum for Diploma in Education (D.Ed.), Published by MBSE, Aizawl Vide Notification No. MBSE/Acad.(S)/2007-08/177 Dated 31st May 2013, and Prospectus & Syllabus for Two-year Diploma in Teacher Education (D. T. Ed.) published by the DIET Aizawl in 2000. Besides these two documents the researcher had also conducted unstructured interview with the principals of both DIETs in relation to the ICT component in the Diploma in Education offered by their institutes.

2. Primary Sources:

The data relating to the third and fourth objective; viz. availability and level of use of ICT infrastructure in teacher education programmes, were collected directly from the Principals through the information-cum-check listspecifically developed by the researcher for this purpose.

Data Analysis Procedures

The data relating to the various objectives of the study has been analyzed by using different statistical techniques depending on the nature of data. For instance:

1. the qualitative data relating to the first and second objective on examination of ICT components in elementary teacher education programmes in the DIETs under study; that was collected from booklet on Curriculum for Diploma in Education (D.Ed.), Published by MBSE, Aizawl and Prospectus published by the DIET Aizawl in 2000; was analysed through content analysis of these document.

2. the data relating to ICT infrastructure and level of its use (third and fourth objective) was basically a nominal data, was analyzed by using frequency count and percentages.

Analysis of Data

The study of the ICT components in elementary teacher education programmes in the DIET in Aizawl in light of the National Curriculum Framework for Teacher Education (NCTE).

The NCTE prescribed syllabus is followed by the DIET in Aizawl with minor modifications and adaptations. Since the study was focused on the ICT component in the syllabus of the elementary teacher education programmes, the investigator

concentrated on the study of ICT subject component in the syllabus of the Diploma in Elementary Education (D.El.Ed.). After examining the syllabi of Diploma in Teacher Education (D.T.Ed.) offered by the DIETs till 2014, and of D.L.Ed.implemented by both DIETs from 2014, it was found that: the DIET has been offering a Two-year Diploma in Teacher Education (D.T.Ed.) till 2014, the same from 2014 has been replaced by Two-year Diploma in Education (D.L.Ed) from 2014.

1. The curriculum for two year elementary teacher education programme followed by Aizawl DIET consist of courses on - Child Studies, Educational Studies, Contemporary Studies, Curriculum and Pedagogic Studies, Optional pedagogy (social science education, language education, mathematics education, science education), Practicum and School Internship. In these broadly categorised course there is no subject related to ICT or Educational Technology.

2. There was a full optional paper on Educational Technology under additional specialization in D. T. Ed. till 2014. However, in the new course adopted for D.L.Ed. by both DIETs from 2015 there is no paper on Educational Technology or ICT (See Appendix D and Appendix E).

3. Fortunately, National Institute of Electronic and Information Technology (NIELIT) has provided 30 computers to DIET Aizawl. This has quite a positive impact on the teacher education programme in the DIET Aizawl. Although there was no computer related subject in D. El. Ed. syllabus as per the NCFTE 2009, the DIET Aizawl, keeping in view the importance of ICT, was conducting two classes per week on Information Technology.

The study of the ICT components in elementary teacher education programmes in the DIET in Lunglei in light of the National Curriculum Framework for Teacher Education (NCTE).

The NCTE prescribed syllabus is also followed by the DIET in Lunglei with minor modifications and adaptations. After examining the syllabi of D.T.Ed.offered by the DIETs till 2014, and of D.Ed. implemented by Lunglei DIET from 2014, it was also found that: the DIET has been offering a Two-year Diploma in Teacher Education (D.T.Ed.) till 2014, the same from 2014 has been replaced by Two-year Diploma in Education (D.Ed) from 2014.

1. Similar to the curriculum for two year elementary teacher education programme followed by Aizawl DIET, the curriculum followed by Lunglei DIET also consist of courses on - Child Studies, Educational Studies, Contemporary Studies, Curriculum and Pedagogic Studies, Optional pedagogy (social science education, language education, mathematics education, science education), Practicum and School Internship.

In these broadly categorized course there is no subject related to ICT or Educational Technology.

2. There was a full optional paper on Educational Technology under additional specialization in Diploma in Teacher Education (D. T. Ed.) till 2014. However, in the new course adopted for Diploma in Education (D.Ed.) by both DIETs from 2015 there is no paper on Educational Technology or ICT (See Appendix D and Appendix E).

3. National Institute of Electronic and Information Technology (NIELIT) is planning to provide 21 computers to the DIET Lunglei.

The committee constituted by NCTE for the development of Syllabi for D. El. Ed. has submitted a draft curriculum package to NCTE. The committee in its proposed syllabi for D. El. Ed. has included two half papers on Pedagogy and ICT integration across the Curriculum-I, and Pedagogy and ICT integration across the Curriculum-II of 3 credits each in 1st and 2nd year of D. El. Ed., respectively. However, the said curriculum package submitted by the said committee has not yet been approved and implemented by the NCTE.

ICT Infrastructure in the DIETs

This section deals with the study of data relating to the ICT Infrastructure in Aizawl and Lunglei DIET. The study was undertaken with an information schedule-cum- checklist consisting of 8 questions developed by the investigator as mention in the methodology paragraphs. The respondents' answers to the issues in this questionnaire were recorded. Item wise analysis of the responses has been presented as under.

1) Status of Power Supply, Fax Machine Landline Telephone & Cable/WLL/ DTH TV

Table- 1

Status of Power Supply, Fax Machine Landline Telephone & Cable/WLL/DTH TV

Sl. No.	Facilities	DIET Aizawl	DIET Lunglei
1.	Reliable electricity	Yes	Yes
2.	Solar power	No	No
3.	Generator power	Yes	No
4.	Inverter	Yes	No
5.	Landline telephone	Yes	Yes
6.	Fax machines	Yes	Yes

Table-1 shows that DIET Aizawl, except solar power, has all other facilities like reliable electricity, stand by generator power, inverter, landline telephone, fax machine, cable TV etc., whereas the DIET Lunglei has only reliable electricity, landline telephone and fax machine, but does not have power backup, such as, solar power, inverter and generator power.

In terms of infrastructure facilities it seems that DIET Aizawl is relatively better equipped than DIET Lunglei. However, one fails to understand why DIET Lunglei is being neglected when both of these DIETs have been conducting similar job relating to pre-service and in-service training for elementary school teachers. May be DIET Aizawl being located in capital city, gets more and easy attention of state level educational administrators and policy makers. Besides Aizawl being the biggest district having much more number of schools and teachers than Lunglei district, it might be getting larger chunk of funds.

2) Status of ICT Unit

Table-2

Status of ICT Unit in the DIET Aizawl and DIET Lunglei

Sl. No.	Facilities Relating to ICT Unit	DIET Aizawl	DIET Lunglei
1.	Separate unit	Available	Not Available
2.	Computer lab for ICT classes	Available	Not Available
3.	Number of computer in the Lab	30	Nil*
4.	Computer has been used	For more than 8 years	No

NIELIT is likely to provide 21 Computers with accessories

A quick glance at Table- 2 reveals that DIET Aizawl is privileged with a separate ICT unit and lab with 30 computers and related accessories provided by NIELIT, whereas the ICT unit in DIET Lunglei is in a bad state. However, while discussing this matter with the principal DIET Lunglei, it was pleasing to know that NIELIT is likely to provide 20 computers with required accessories to the DIET Lunglei in near future.

3) Availability of ICT related Facilities and Equipment in DIETs:

Table-3
The ICT Facilities Available in DIET Aizawl and DIET Lunglei

Sl. No.	Items	DIET Aizawl (Number)	DIET Lunglei (Number)
1.	Computers	45	Nil*
2.	Laptops	17	8
3.	Server with Terminals	1	1
4.	No. of Internet Nodes	22	-
5.	Scanner	1	1
6.	Web camera	-	-
7.	Modem	22	2
8.	Broadband Antenna	7	2
9.	Video Camera	1	-
10.	Dish TV connection	1	-
11.	Educational CDs/DVDs	-	-
12.	Radio	-	-
13.	Institution blog	1	-
14.	Institution website	1	1
15.	Subject Specific Software in Computers	TMS, etc	-
16.	Video Conferencing Facility	-	-

NIELIT is likely to provide 20 Computers with accessories

It is evident from Table-3that there are 45 computers available in DIET Aizawl, of which 30 are in the computer lab, whereas there is no computer in DIET Lunglei. There are 17 laptops in DIET Aizawl and 8 laptops in DIET Lunglei. Each of the DIET have server with terminal. DIET Aizawl has 22 internet nodes. Both have scanner. Neither of them have web camera. DIET Aizawl have 22 modem whereas DIET Lunglei have 2. DIET Aizawl has 7 broadband antennas and DIET Lunglei have 2. Video camera is available in DIET Aizawl but not in DIET Lunglei. DIET Aizawl has Dish TV connection whereas there is no connection in DIET Lunglei. Both have institutional website. Video conferencing facilities are not available in both the DIETs.

4) Operation and Maintenance of ICT Facilities

Table-4
Operation and maintenance of the ICT facilities in DIET Aizawl and DIET Lunglei

Sl. No	Operation, repair and maintenance	DIET Aizawl	DIET Lunglei
1.	Personnel operating the ICT facilities	Office Staff and lecturers from technology cell	Office Staff and lecturers
2.	Repair and maintenance	Office Staffs and private firm (NIELIT)	Office Staff

The computers in the DIET of Aizawl are generally operated by the office staff and lecturers form the Technology cell (Table-4), In DIET Lunglei the ICT facilities are operated by the office staffs and lecturers. In times of repairmen and maintenance, the office staffs and private firms took care of it in DIET Aizawl and the office staffs of DIET Lunglei took care of the repairmen and maintenance of the ICT facilities available.

5) Computer Fee and Maintenance of ICT Facilities

Table-5
Computer Fee and Maintenance of ICT Facilities

Sl. No.	Computer and other related fees in	DIET Aizawl	DIET Lunglei
1.	Computer fee	No	No
2.	Computer course	No	No

A quick glance at Table-5 shows that both of DIETs under study neither offer any computer course nor charges any computer fee from their student-teachers. On the other hand there is no computer available for the student-teachers in DIET Lunglei.

6) Level of Use of ICT facilities

Table-6
Level of Use of ICT Facilities by Student-Teachers

Sl. No.	Computer	DIET Aizawl	DIET Lunglei
1	Use of computer by the student-teachers	2 class per week and lab open for student-teachers during working hours	No
2	Use of computers after class by student-teachers	No	No
3	Use of internet after class by student-teachers	No	No

The DIET Aizawl conducts two IT classes per week, and its computer lab remains open throughout its working hours and student teachers can access it during their free time but not after classes are over (Table-6). At the same time, there is no computer available for the student-teachers in DIET Lunglei.

7) Utilization of ICT Lab

Table-7
Other Institutional Functions Supported by ICT in DIET Aizawl and DIET Lunglei

Sl. No.	ICT Supported Functions	DIET Aizawl	DIET Lunglei*
1.	Administration	Yes	No
2.	Database	Yes	No
3.	Library	Yes	No

NEILIT is likely to provide 21 computers with accessories

The data vide Table-7 shows DIET Aizawl makes optimum use of its ICT lab as its administration, database, library and research projects are supported by ICT, whereas DIET Lunglei does not have any ICT lab.

8) Additional ICT Infrastructure Proposed

Table-8
Additional ICT Infrastructure Proposed by Teacher Educators of both DIETs to use Technology more Effectively

Sl. No	Additional ICT Infrastructure Proposed by Teacher Educators	
	DIET Aizawl	DIET Lunglei
1.	Smart Board	Generator
2.	Flat TV	Projector
3.	Sound System	Computers Smart TV

When asked what additional ICT infrastructure they required using it more effectively, DIET Aizawl proposed for smart board, flat TV and a good sound system, whereas DIET Lunglei being less equipped, they proposed for generator, projector and Smart TV. It was surprising to know that both DIETs did not propose any thing relating to the educational software, CDs and DVDs etc. (See Table-8).

Discussion of Findings

The study revealed that there is a great distinction between Aizawl DIET and Lunglei DIET in the area of ICT. Aizawl DIET made a good use of computers and other technologies in the institution and with the help of NIELIT, several sets of

computer have been provided for the students to learn ICT. At the same time Lunglei DIET made no use of ICT in the teaching learning and administration of the institution; however, the DIET promised that the institution is to be equipped with technology, and computers will be provided by the NIELIT for the use of student teachers in the near future.

The reason for Aizawl DIET being better ICT equipped may be that it has advantages in its location, as it is in Mizoram's capital city, Aizawl. And as for Lunglei DIET, the institution is located at the southern part of the state, Lunglei, southern Mizoram. Yet, to many, Lunglei town is accepted as the unofficial capital of the southern side of Mizoram, not just because it is the biggest town in the southern area but also because it caters to a large percent of the state population. If Lunglei DIET is as well equipped as Aizawl DIET, it has the chance of being capable of handling the same number of students. The result would be that teachers from that side would not need to come to travel all the way to Aizawl to receive training in ICT, thus saving time, money and available facilities would be shared between fewer students.

Looking at the situation of the two DIETS, the state of their ICT usage is unsatisfactory, technology is growing swiftly and it is the teachers of every school who should be more fluent in it but rather it is not, and this may be the fault of the teacher education institution. Teachers should be the one teaching the students how to make good use technology and not the other way round.

Conclusion

It is clear that ICT is here to stay, in order to equip the teachers to deal with modern technology. However, may be because this is the initial stage, ICT seems to be rather neglected in the DIETS within Mizoram. Therefore, seeing that ICT is going to gain even more importance in the coming years, it is a must for ICT to gather momentum and become a stable and important part of teacher education programmes within the state.

References

Chaudhary, P. (2012). Effectiveness of ICT training program on digital literacy. *International Referred Research Journal,* 3(29), 76-78.

Chuaungo, L. (2016). Use of ICT for education among B. Ed students and teachers in Mizoram. In L. Mishra (Ed.) *Teacher education in India: Problems and prospects*. England: Cambridge Scholars Publishing Ltd., 1-7

Grove, K.J. (2008). *Student teacher ICT use: Field experience placements and mentor teacher influences.* OECD ICT and Teacher Training Expert Meeting Paris, France. Retrieved from *https://www.oecd.org/edu/ceri/41674583.*

Haugland, S.W. (1999). What role should technology play in young children's learning? Part 1. *Young Children* 54(6), 26–31, Retrieved from https://www.learntechlib.org/p/88444 Accessed on 14.03.2015, 12:45 PM

Jung, I. (2005). ICT-pedagogy integration in teacher training: Application cases worldwide. *Educational Technology & Society*, 8(2), 94-101. Retrieved from https://eric.ed.gov/?q=EJ844718 Accessed on 15.12.2015, 1:23 PM

Mitchell, R. and Laski, E. (2013). Integration of technology in elementary pre-service teacher education: An examination of mathematics methods courses. *Journal of Technology and Teacher Education*, 21(3), 337-353. Retrieved from https://eric.ed.gov/?q=EJ1017022 accessed on 28.2.2016, 8:55 AM

National Council for Teacher Education. (2009). National *curriculum framework for teacher education, towards preparing professional and humane teacher*. New Delhi.NCTE. Retrieved from ncte-india.org/ncte_new/pdf/NCFTE_2010. Accessed on 28.9.2015, 9:32 AM

Analysis of Higher Education Enrolment in Mizoram

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David Rosangliana**

Abstract

One of the most important indicators of growth of higher education is enrolment. By focusing on the gross enrolment ratio (GER), the present paper attempts to study the enrolment trend of higher education sector during 2010-17 in the state of Mizoram, India. Based on data from All India Survey on Higher Education (AISHE) and Census of India, the study found that less than one-fourth at the age group of 18-23 are inside higher education system in Mizoram, which indicates low GER. Analysis was done on level-wise, district-wise, gender distribution and distance mode throughout the state of Mizoram. The study confirms that under-graduate level has the highest enrolment ranging from 73.32% to 83.39% from the total enrolment on the basis of level-wise. District-wise analysis has also shown that Aizawl district and Mamit district have the highest and the lowest GER respectively throughout the study period. Despite tremendous growth in GER therein, there exist wide disparities among the eight districts of Mizoram. Districts like Mamit, Lawngtlai, Saiha and Serchhip have been identified to lag behind other districts like Aizawl, Lunglei, Champhai and Kolasib.

Keywords – *Gross Enrolment Ratio, Inter-district analysis, Gender Parity Index, Mizoram.*

Introduction

In India, with the growing size and diversity of the higher education sector, it has become necessary to develop a sound database. It is also required for planning, policy formulation, fulfilling international commitments, research etc. To address this issue, Department of Higher Education (DHE), Ministry of Human Resource Development (MHRD) had decided to conduct an All India Survey on Higher Education(AISHE)from

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2010-11 on yearly basis, with the following objectives to identify and capture all the institutions of higher learning in the country and to collect the data from all the higher education institutions on various aspects of higher education. The survey covers all the institutions in the country engaged in imparting of higher education. To know the real picture of higher education of the country, it is not enough to only know the status of the states and union territories of the country, but the status of the districts of the states and union territories. This will lead to identification of educationally backward districts in terms of educational institution, enrolment, gender, social class and so on.

GER is the number of students enrolled in a given level of education regardless of age by the population of the age group which officially corresponds to the given level of education, and multiplies the result by 100 (http://uis.unesco.org/en/glossary-term//gross-enrolment-ratio). In other words, GER is the total enrolment in higher education, regardless of age, expressed as a percentage to the eligible official population (18-23 years) in the given period.From the definition of GER, a high GER generally indicates a high degree of participation, whether the pupils belong to the official age group or not. GER at each level of education should be based on total enrolment in all types of educational institutions, including public, private and all other institutions that provide organized educational programs. It has to be noted that GER can exceed 100% due to the inclusion of over-aged and under-aged pupils/students because of early or late entrants, and grade repetition.

UNESCO released Gender Parity Index (GPI), which is a socioeconomic index usually designed to measure the relative access to education of males and females. In its simplest form, it is calculated as the quotient of female indicator by male indicator in a given stage of education (primary, secondary, higher, etc.) GPI equal to 1 indicates parity between females and males. In general, a value less than 1 indicates a disparity in favour of boys and a value greater than 1 indicates a disparity in favour of girls.

A number of literatures have been produced on enrolment and related aspects by a number of scholars. Adeyami and Akpotu (2004) critically analyzed gender disparity of enrolment in Nigerian Universities and revealed that gap existed between female and male in the university enrolment with lower female enrolment in all aspects of the Universities; they made suggestions including sustained enlightenment program, fine-tuning labour laws and accommodating female under the "educationally disadvantaged" admission policy in order to narrow the gender gap in the university enrolment. Rowan-Kenyon (2007) studied predictors of delayed college enrolment and the impact of socioeconomic status; he concluded that socioeconomic status is related to timing of college enrolment in the sense that students who enroll immediately or those who delay enrolment have higher socioeconomic status than those who do not enroll. Sinha

& Srivastava (2008) studied inclusiveness and access of social groups to higher education; he found that among the social and religious groups Muslims fared poorly while high caste Hindu done very well when it comes to higher education enrolment and their pattern of enrolment varies and diversified so that much needs to be done in order to make higher education truly inclusive. Dubey (2008) examined determinants of post-higher secondary education in India and found that there are large disparities in the enrolment rate between urban and rural sector and substantial disparity between the poor and non-poor. Chuaungo (2015) studied access to higher education in India and conclude that India still needs to improve in access and expansion in terms of higher education enrolment and number of institution.Data are usually obtained from government and independent publications.

Objectives

The objectives of the study are as follows:

1. To analyze higher education enrolment of Mizoram in terms of level, gender, mode of studies and district-wise.
2. To study and analyzehigher education GER and GPI of eight districts of Mizoram.
3. To identify educationally backward districts of Mizoram.

Database and Methodology

Data was collected on several parameters such as number and type of institutions, teachers, student enrolment, programs, examination results, finance, scholarship & stipend, infrastructure, etc. Indicators of educational development such as Institution Density, Gross Enrolment Ratio, Pupil-teacher ratio and Gender Parity Index can also be calculated from the data collected through AISHE. The following formula is used for calculation:

$GER_t = E_t*100/P_t$,
whereGER_t= Gross Enrolment Ratio of higher education in the year 't',
E_t = the enrolment in the year 't' and
P_t = the population in age group (18-23 based on last birthday) in the year 't'.

Here, we need to know the total enrolment of higher education, population of the age group (18-23 years) corresponding to higher education. MHRD has been publishing AISHE report containing enrolment data in higher education on yearly basis since 2010-11. It also published estimates of population for the years 2010, 2011, 2012, 2013, 2014, 2015& 2016 in the age group 18-23 years for all states and Union. Based on the estimated total population in the age group 18-23 years of the state and incorporating the age-wise population from 2011 census of India, the populations of the districts of Mizoram in the age group 18-23 years are estimated. Thus, AISHE

database has been used to analyze enrolment and calculate GER and GPI for the districts of Mizoram using population estimates as published by MHRD.

Level-wise Analysis

The following table shows level-wise higher education enrolment of Mizoram at various levels during 2010-17:

Table 1
Enrolment of Mizoram at various levels

	Ph.d			M.Phil			Post Graduate		
	M	F	T	M	F	T	M	F	T
2016-17	362	256	618	82	95	177	2011	2140	4151
2015-16	287	268	555	48	76	124	1807	1844	3651
2014-15	38	35	73	14	24	38	1914	1783	3697
2013-14	188	223	411	34	57	91	1824	1742	3566
2012-13	61	87	148	20	36	56	1749	1579	3328
2011-12	57	71	128	8	23	31	1321	1248	2569
2010-11	34	29	63	10	25	35	1814	1527	3341

	Under Graduate			PG Diploma			Diploma		
	M	F	T	M	F	T	M	F	T
2016-17	12961	11584	24545	43	13	56	763	1317	2080
2015-16	12151	11044	23195	23	11	34	1979	1836	3815
2014-15	12444	12038	24482	31	14	45	872	1300	2172
2013-14	12378	11401	23779	28	12	40	1136	1642	2778
2012-13	12601	12078	24679	58	6	64	359	937	1296
2011-12	11046	9886	20932	23	8	31	629	1073	1702
2010-11	12971	11656	24627	54	21	75	593	1112	1705

	Certificate			Integrated			Grand Total		
	M	F	T	M	F	T	M	F	T
2016-17	0	0	0	56	36	92	16278	15441	31719
2015-16	7	20	27	40	22	62	16342	15121	31463
2014-15	9	16	25	16	16	32	15338	15226	30564
2013-14	3	18	21	0	0	0	15591	15095	30686
2012-13	5	20	25	0	0	0	14853	14743	29596
2011-12	2	6	8	0	0	0	13086	12315	25401
2010-11	0	0	0	0	0	0	15476	14370	29846

Source: AISHE Report 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16 & 2016-17.

The analysis of students' enrolment during seven years shows that under-graduate studies has the highest composition throughout ranging from 73.32% in 2015-16 to 83.39% in 2012-13; followed by post-graduate studies ranging from 10.11% in 2011-12 to 13.09% in 2016-17. The total enrolment composition of other studies namely Ph.d, M.Phil, PG Diploma, Diploma and Integrated courses lied in between 5.37% in 2012-13 and 14.67% in 2015-16.

The following table gives total enrolment of districts of Mizoram at various levels during 2016-17.

Table 2
Enrolment at various levels of Mizoram districts

District	Level								
	Ph.D			M.Phil			Post Graduate		
	M	F	T	M	F	T	M	F	T
Aizawl	362	256	618	82	95	177	2011	2140	4151
Champhai	0	0	0	0	0	0	0	0	0
Kolasib	0	0	0	0	0	0	0	0	0
Lawngtlai	0	0	0	0	0	0	0	0	0
Lunglei	0	0	0	0	0	0	0	0	0
Mamit	0	0	0	0	0	0	0	0	0
Saiha	0	0	0	0	0	0	0	0	0
Serchhip	0	0	0	0	0	0	0	0	0
Mizoram	362	256	618	82	95	177	2011	2140	4151

District	Level								
	Under Graduate			PG Diploma			Diploma		
	M	F	T	M	F	T	M	F	T
Aizawl	9500	8490	17990	43	13	56	126	721	847
Champhai	835	864	1699	0	0	0	25	19	44
Kolasib	418	402	820	0	0	0	54	61	115
Lawngtlai	554	293	847	0	0	0	176	111	287
Lunglei	1061	1021	2082	0	0	0	248	256	504
Mamit	90	63	153	0	0	0	59	32	91
Saiha	253	224	477	0	0	0	19	24	43
Serchhip	250	227	477	0	0	0	56	93	149
Mizoram	12961	11584	24545	43	13	56	763	1317	2080

District	Level								
	Certificate			Integrated			Grand Total		
	M	F	T	M	F	T	M	F	T
Aizawl	0	0	0	56	36	92	12180	11751	23931
Champhai	0	0	0	0	0	0	860	883	1743
Kolasib	0	0	0	0	0	0	472	463	935
Lawngtlai	0	0	0	0	0	0	730	404	1134
Lunglei	0	0	0	0	0	0	1309	1277	2586
Mamit	0	0	0	0	0	0	149	95	244
Saiha	0	0	0	0	0	0	272	248	520
Serchhip	0	0	0	0	0	0	306	320	626
Mizoram	0	0	0	56	36	92	16278	15441	31719

Source: AISHE Report 2016-17.

Considering the districts of Mizoram in 2016-17, Aizawl district have the highest enrolments of 23,931 followed byLunglei districtof 2,586. On the other hand Mamit district was in the bottom with 244, followed by Saiha district having enrolment 520.

If we consider the level of studies, Aizawl district has the highest enrolment in all levels. The other seven districts have enrolment in under-graduate studies and diploma courses; whereas no enrolment in other levels namely Ph.d, M.Phil, Post-graduate, PG-Diploma, Certificate and Integrated course.

District-wise Analysis

District-wise GER of Mizoram during 2010-2017have been calculated by taking the percentage of student enrolment of higher educational institution in that particular district from 18-23 years population of the same district which are shown in the following tables:

Table 3
GER of higher education

	Aizawl			Champhai			Kolasib		
	M	F	T	M	F	T	M	F	T
2016-17	49.4	46.8	48.1	12.3	13	12.7	10.2	9.8	10
2015-16	44.3	42.1	43.2	13.7	15.1	14.4	8.2	7.4	7.8
2014-15	47.8	47.8	47.8	5.2	5.2	5.2	5.2	5.8	5.5
2013-14	47.4	46.8	47.1	4.9	4.3	4.6	5	6.5	5.7
2012-13	43.2	43	43.1	3.9	3.7	3.8	6.4	6.7	6.5
2011-12	36.3	35.2	35.8	4.2	3.4	3.8	10.6	8.6	9.6
2010-11	41.1	40.9	41	9.3	10.1	9.7	9.8	9.1	9.4

	Lawngtlai			Lunglei			Mamit		
	M	F	T	M	F	T	M	F	T
2016-17	10.2	5.4	7.7	14.4	14	14.2	3.2	2	2.6
2015-16	10.6	5	7.7	23.2	20.6	21.9	6.7	3.1	4.9
2014-15	5.4	3.2	4.3	20.8	19.1	19.9	1.1	1.3	1.2
2013-14	4.5	2.8	3.6	25.5	20.6	23	1.1	1.4	1.3
2012-13	3.4	3.2	3.3	29.7	26.4	28	1.3	1.4	1.3
2011-12	3.5	2.1	2.8	24.9	20.6	22.7	1.8	1.7	1.8
2010-11	1.3	1.1	1.2	24.8	19.4	22.1	1.2	1.1	1.1

	Saiha			Serchhip			Mizoram		
	M	F	T	M	F	T	M	F	T
2016-17	8.3	7.1	7.7	7.9	8.6	8.3	25.3	23.7	24.5
2015-16	12.1	9.8	10.9	9.7	9	9.4	25.2	23	24.1
2014-15	6.1	4.7	5.4	5.1	5.2	5.2	23.5	23	23.3
2013-14	5.7	5.1	5.4	3.3	3.7	3.5	23.7	22.7	23.2
2012-13	2.9	5	4	3.2	3.2	3.2	22.4	22	22.2
2011-12	5.9	6.3	6.1	3.1	3.5	3.3	19.6	18.3	19
2010-11	12	12.4	12.2	3.1	3.1	3.1	22	21.2	21.6

Among the eight districts of Mizoram, the above figures show that GER of Aizawl and Mamit is maximum and minimum respectively throughout the years. Considering the average GER of seven years, Aizawl stood first with 43.7 followed by Lunglei with 21.7, while the other six districts are of GER below ten and Mamit is in the bottom with GER 2.0. But, if we check for 2016-2017, the latest year under consideration, there are four districts whose GER are more than ten namely Aizawl (48.1), Lunglei (14.2), Champhai (12.7) and Kolasib (10) whereas GER of other four

districts are below ten namely Serchhip (8.3), Saiha (7.7), Lawngtlai (7.7) and Mamit (2.6). The data indicates that inequality of district is very high in higher education GER with maximum 48.1 and minimum 2.6 for the latest year.

Aizawl and Lungleistood first and second with 44.2, 23.3 respectively in the average male GER of seven years whereas the other six districts are of GER below 10 with Mamit in the bottom with GER 2.3. In 2016-17, five districts namely Aizawl (49.4), Lunglei (14.4), Champhai (12.3), Kolasib (10.2) and Lawngtlai (10.2) are with GER above ten. The other three districts namely Saiha (8.3), Serchhip (7.9) and Mamit (2.3) are with GER below ten.

Similarly, considering the average female GER of seven years, Aizawl stood first with 43.2followed by Lunglei with 20.1, while the other six districts are of female GER below ten and Mamit is in the bottom with GER 1.7. But, if we check for 2016-17, the latest year under consideration, there are three districts whose female GER are above ten namely Aizawl (46.8),Lunglei (14) andChamphai(13) whereas female GER of other five districts are below ten namely Kolasib (9.8) followed by Serchhip (7.9), Saiha (7.1), Lawngtlai (5.4) and Mamit (2). The data indicates that inequality of district is very high in female GER with maximum 46.8 and minimum 2 for the latest year.

Gender Distribution

The following table highlights GPI of Mizoram higher education for the year 2010-11 to 2016-17:

Table 4
Gender Parity Index of Mizoram districts

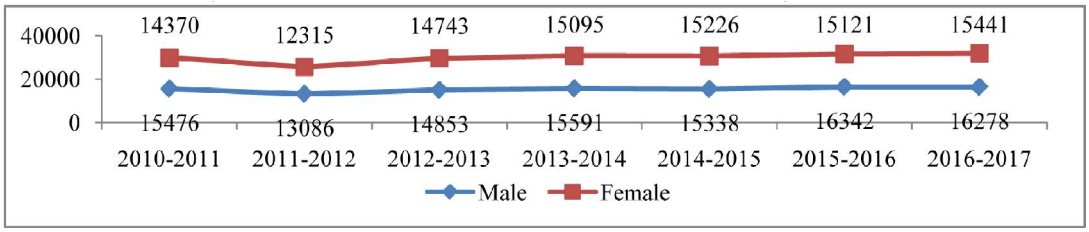
	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11
Aizawl	0.95	0.95	1.00	0.99	1.00	0.97	1.00
Champhai	1.06	1.10	1.00	0.88	0.95	0.81	1.09
Kolasib	0.96	0.90	1.12	1.30	1.05	0.81	0.93
Lawngtlai	0.53	**0.47**	0.59	0.62	0.94	0.60	0.85
Lunglei	0.97	0.89	0.92	0.81	0.89	0.83	0.78
Mamit	0.63	**0.46**	1.18	1.27	1.08	0.94	0.92
Saiha	0.86	0.81	0.77	0.89	1.72	1.07	1.03
Serchhip	1.09	0.93	1.02	1.12	1.00	1.13	1.00
Mizoram	0.94	0.91	0.98	0.96	0.98	0.93	0.96

Out of eight districts, six districts of Mizoram except Mamit and Lawngtlai were having good GPI during seven years. In case of Mamit district and Lawngtlai district, GPI was very low in some years; 0.46 (Mamit, 2015-16), 0.47 (Lawngtlai, 2015-16) were the two lowest GPI during the period. GPI of the whole state was in between

0.91 in 2015-16 to 0.98 both in 2012-13 and 2014-15 which is very good result compared to other states of India.

Gender-wise enrolment of higher education during 2010-2017 for the whole state of Mizoram is shown below:

Figure 1
Gender-wise enrolment of Mizoram higher education



Source: AISHE Report 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16 & 2016-17.

If we look into the whole picture during 2010-17, it is fortunate to see that gender differences were negligible in higher education enrolment in the state of Mizoram.

Distance Mode

The following table shows the enrolment status of distance education in the state of Mizoram during 2010-17:

Table 5
Distance mode enrolment of higher education in Mizoram

	Post-Graduate			Under-Graduate			PG Diploma			Diploma		
	M	F	T	M	F	T	M	F	T	M	F	T
2016-17	935	1095	2030	1931	1923	3854	43	13	56	144	166	310
2015-16	896	954	1850	1693	1713	3406	23	11	34	593	544	1137
2014-15	1083	1068	2151	2074	2211	4285	31	14	45	333	402	735
2013-14	1091	1102	2193	2123	2207	4330	28	12	40	717	718	1435
2012-13	1085	1016	2101	2200	2196	4396	58	6	64	2	14	16
2011-12	749	735	1484	1700	1672	3372	23	8	31	247	194	441
2010-11	1274	1075	2349	2463	2175	4638	54	21	75	254	181	435

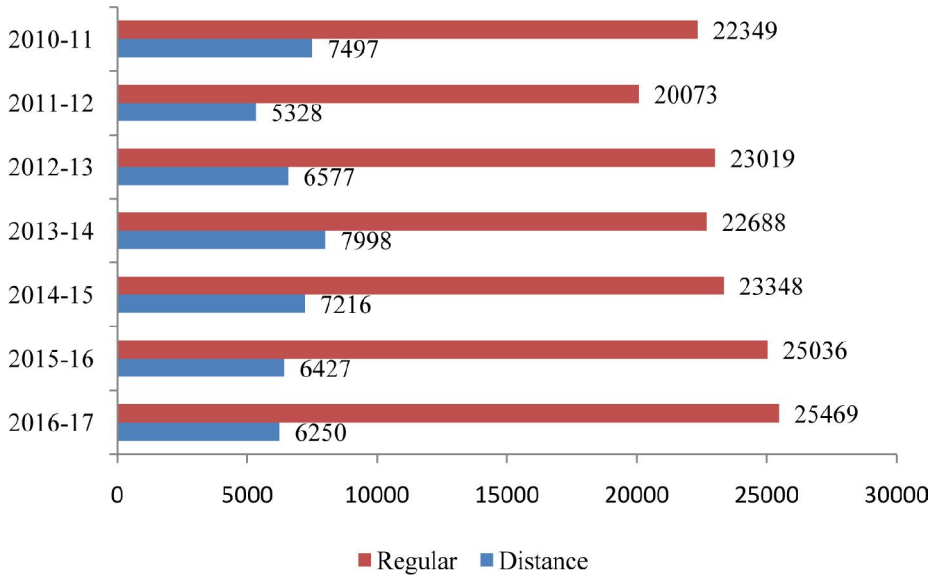
	Certificate			Integrated			Total		Grand Total
	M	F	T	M	F	T	M	F	
2016-17	0	0	0	0	0	0	3053	3197	6250
2015-16	0	0	0	0	0	0	3205	3222	6427
2014-15	0	0	0	0	0	0	3521	3695	7216
2013-14	0	0	0	0	0	0	3959	4039	7998
2012-13	0	0	0	0	0	0	3345	3232	6577
2011-12	0	0	0	0	0	0	2719	2609	5328
2010-11	0	0	0	0	0	0	4045	3452	7497

Source: AISHE Report 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16 & 2016-17.

The number of enrolment in distance mode is fluctuating in between 5,328 in 2011-12 and 7,998 in 2013-14. Most of the students in distance mode were from under-graduate and post-graduate studies.

During 2010-17, the lowest and highest percentage of distance mode enrolment to the total enrolment of the state was 19.70% in 2016-17 and 26.06% in 2013-14. Decline in distance mode enrolment was found for three consecutive years since 2013-14. As distance mode of M.Phil and Ph.D were not accepted in India a few years back, this also affect distance enrolment.

Figure 2
Higher education enrolment of distance mode and regular mode of Mizoram



Conclusion

The above analysis shows that Aizawl district which contains the state capital of Mizoram has the highest GER among the districts of Mizoram. There may be so many reasons for this and one of the main factors may be migration to Aizawl from other districts being state capital with better facilities. On the other hand, Mamit district has the least GER of 1.1 in 2010-11 and 2.6 in 2016-17 which is very low compared to the overall state GER ranging from 19.0 to 24.5 during seven years. So, in order to increase GER of the whole state, it is required to develop the under-developed districts in terms of infrastructure and manpower in the institutions in districts of Mamit, Lawngtlai, Saiha and Serchhip.

Our result also shows that the GER of male and female is almost similar for all the districts with the exception ofMamit and Lawngtlai. This is further corroborated by the increasing GPI for the two districts. This clearly indicates that suitable measures likesensitization through multi-media, seminars, workshop, etc. need to be done to increase female enrolment in these two districts. Further, our study also shows that post graduate students comprise only less than 15% of the total students in higher education while more than 2/3rdwere under-graduate students.Mizoram has only three Universities which offer post graduate courses and, many potential students could not get seats in these universities. It is unfortunate to see that post-graduate and research institution do not exist in all the seven districts out of eight districts of the state. Hence, setting up of new post graduate institutions, if possible, would be highly recommended, or else strengthening of the existing Universities to accommodate more students would also be an important step. Promoting distance mode of studies could also be a good move as this does not have big financial concurrence. There are some courses which are not available inside the state; thus, setting up of institution depending on the need of the students is also an important task.

References

Adeyemi, K. & Akpotu, N. (2004). Gender analysis of student enrolment in Nigerian Universities, *Higher Education* 48:361-378. Retrieved from Adeyami,

Chuaungo, L. (2015). Access to higher education in India: An overview. *Mizoram Educational Journal*. 1(1), 5-18.

Directorate of Economics & Statistics, Government of Mizoram (2013). Statistical Abstract of Mizoram: 2013.

Department of Higher Education, MHRD, Government of India. (2013,2014,2015,2016, 2017). *All India Survey on Higher Education 2010-11, 2011-20, 2012-13, 2013-14, 2014-15, 2015-16&2016-17*. NewDelhi.

Dubey, A. (2008). Determinants of post-higher secondary enrolment in India. In R.S. Srivastava (Ed.). *Higher Education in India – Issues related to Expansion, Inclusiveness, Quality and Finance,* pp.139-198. New Delhi: University Grants Commission.

Education Monitoring Report (2015), *The education for all development index*. Retrieved from Global MHRD, Government of India (2014). *Statistics at a glance*. Retrieved from Educational

Rowan, H.T. (2007). Predictors of delayed college enrolment and the impact of socio-economic status. *The Journal of Higher Education,* 78(2), March-April, pp. 188-214. Retrieved from Kenyon,

Sinha, S. & Srivastava, R.S. (2008). Inclusiveness and access of social groups to higher education. In R.S. Srivastava (Ed.). *Higher Education in India – Issues related to Expansion, Inclusiveness, Quality and Finance,* pp.111-138. New Delhi: University Grants Commission.

UNESCO Institute for Statistics (2014). *Education in Asia: Expanding out, expanding up (The rise of graduate education and university research..* Retrieved from *Higher*.

UK (2017). *Pattern and trends in UK higher education 2017.* Retrieved from Universities

Definition of gross enrolment ratio. (n.d.). Retrieved from http://uis.unesco.org/en/glossary-term//gross-enrolment-ratio.

Single year age returns by residence and sex.(n.d.). Retrieved from http:// www.censusindia.gov.in/ 2011census/Age_level-Data/India/Age_data.xls.

Impact of Intervention Strategy on Development of Basic Work Skills among Visually Impaired Students with Respect to Their Degree of Impairment and Type of School

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Abstract

The present study was conducted to explore the basic work skills among totally blind and low vision students. Total twenty (20) skills were taken as basic work skills and categorized in to four levels according to usability and simplicity. In this study, the sample comprised of 192 students belonging to class VI – IX. These students were selected from special and inclusive schools of odisha. The total sample was categorized according to gender (boys & girls), degree of impairment (totally blind & low vision). Of these 192 students, 96 were boys and 96 were girls. Personal databank regarding their name, standard, age , gender , school , type of students , age at onset, onset of impairment (congenital or acquired) and basic work skills check list (asked and filled by the investigator) were studied to know about background of each student. Findings revealed that "low vision children were performed better acquire work skills than blind children. Moreover different school settings also have no significant impact on acquiring basic work skills."

Keywords : *Basic work skills, Degree of impairment, Type of schools, Inclusive setup.*

Introduction

Visual Impairment refers to eye defects and diseases that affect millions of people worldwide. The range of effects of visual impairment is from total loss of sight (blindness), to partial sight loss (low vision). Some people having blurred vision can not able see the distant objects properly while some people cannot see close object clearly. It affects most aspects of their daily living functioning including the ability to take care of them, moving to and fro, participating in education such that reading and writing and some other basic skills required for their day to day life.

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Blindness comes under the broad category of visual impairment. It can be defined according to the purpose for which vision is required. It is pertinent to state here that a lack of sight does not signify a lack of capacity to think, imagine or create. Though, visually impaired children do not differ much from their non-disabled sighted peer groups other than seeing, they seems to be more limited than sighted individuals in learning abstract concept because of their lack of vision. The visually handicapped child, who is born blind or whose vision was lost during the early years must rely on the remaining senses of hearing, touch, and to a lesser extent taste and smell for knowledge of environment and for clues for successful adoption. There is some indication that, blind children retain experiences or facts and are able to conceptualize, but do both in a more concrete and less integrated fashion than do sighted children. The vision impaired children can not develop their social behaviour in proper manner due to the lack of their vision, since they can not able to understand non-verbal cues. It results in raising problem behaviour in them and is becomes a major obstacle for their independent living in the latter stage of their life.

The study on visually impairment (totally vision impairment & low vision) is not new, but an innovative and emerging area of special education. The vision loss is referred to totally vision impairment (blind) persons, who are very rare and can not study without Braille while low vision referred to those, who can use their residual vision to perform their day-to-day's activities. In addition they have to train as if they can perform their academic as well as other daily activities properly and easily to perform their daily activities independently. For this, teachers have to take initiative to teach them about some basic work skills, which can help them appropriately.

Basic work skills are varying in complexity. They include areas such as skills relating academics relating self help skills, pre-vocational skills, compensatory skills; it is very difficult for them to learn these skills because of lack of vision. But these are the essential skills for independent functioning of visually impaired in the society.

Activities of Basic work skills comprise every thing in educational setting, work place & at home. These are the basic activities necessary during an ordinary day; there are hundreds of activities, which a person performs from the moment he wakes up in the morning till he goes to sleep at night. These are called basic work-skills as these are required to perform any activities in day-to-day life. There are many academic and living skills not included in the regular curriculum that are nevertheless needed by students with visual disabilities: Alternative academic skills, including communication modes; orientation and mobility; adaptive and assistive technology; leisure and recreation; social interaction skills; independent living skills; career education; work skills and visual efficiency are all critical to an individual's overall development.

While these are skills that all students need, visual disability precludes their acquisition in the same way that children without visual disability learn them. Because of the emphasis on standards-based education, these skills are often underdeveloped in students with visual impairments when there is no time to work on them. Inclusion advocates to implement such academic materials, which will helpful for non-disabled sighted students as well as to educate students with visual impairments in the public schools. Unfortunately, such an approach ignores the many other skills that are not learned by osmosis. These skills are a natural part of the residential school experience, where there is both time and opportunity to address them, but they are often given less status (or are missing altogether) in a child's individualized education programme. The importance of the expanded core curriculum can best be seen in the report of the national transition study, where students with visual impairments spent the greatest amount of time in regular education classes, had higher graduation rates of post-secondary education, but had lower rates of competitive employment and higher rates of skills training post-graduation. Students with visual impairments can be successful academically, but this may occur at the expense of other skills that facilities integration into society.

Prior researches also indicate that, visually impaired children have some objective and subjective limitations which negatively impact their academic achievement. Therefore their instructional programme not only need more time and special material but also specific methods and techniques education of visually handicapped have been aware of the need to emphasis on touch technique (tactual skill) and verbal instructions to compensate for the visual loss while may have expressed the opinion that basic work skills could be improved with verbal instruction and physical assistance. Presently also various computer assisted devices are available for visually disabled persons. Therefore it is necessary to review the available literature to identify various avenues in the education of the visually handicapped children. The literature developed in expanded core curriculum is very rare. Much work is needed in the near future.

Significance of the Study

The greatest concern among professionals in the field of special education is to offer life coping skills to face the employment challenges when they grow. The work skill training is completely neglected in the educational programs. This necessitated the investigator to select the concerned area for research. This investigation aimed to focus the present scenario on the work skill performance of visually impaired students and prepare a basic work skill package, and intervene with the students with various activities developed.

Statement of the Study

The statement of the problem involves the demarcation and formulation of the problem. The present problem is worded as 'Impact of Intervention Strategy on Development of Basic Work Skills among Visually Impaired Students with Respect to Their Degree of Impairment and Type of School'.

Objectives of the Study

- To find out the work skills performance of students with Total Vision Impairment and Low Vision.
- To compare the work skills performance of students with respect to Type of school (namely, Residential & Inclusive)

Hypotheses of the Study

- ☞ There is no significant difference between work skills performance between students with Total Vision Impairment and Low Vision.
- ☞ There is no significant difference between work skills performance of students with respect to type of school namely Residential & Inclusive setup, before and after intervention training.

Delimitation of the Study

1) The size of the sample is limited and taken from Mayurbhanja, Balasore, Bhadrak, and Keonjhar district of Odisha.
2) The study is confined to only limited Grade students s.t. from grade VI to IX

Method of the Study

The present study was experimental in nature. The researcher has identified some basic skills for her study and then she separated these skills in to four separate levels in order of difficulty level. The study involved assessment checklist for each level of work skills besides the work skill package developed. After pre-testing, intervention was given for a period of two months to train her samples students in the work skills and after that posttest was conducted using the same tool administered in the pretest. Relevant statistical procedures were used to analyze and interpret the data. The study conducted among visually impaired students of residential and inclusive school. In this study, the sample comprised of 192 children belonging to class VI - IX. Of these, 192 children, 96 were boys and 96 were girls.

Statistical Techniques Used

The data collected by the investigator from the sample were analyzed using suitable statistical techniques. Mean and Standard Deviation were calculated from the score of performance in acquiring basic skills. 't'-test was applied to test the

significance of difference between the mean scores of the groups on the variables under study.

Result Analysis and Discussion

Analysis is nothing but a systematic examination and evaluation of data or information, by breaking it into the component parts to uncover their inter-relationship, thus providing basis for problem solving and decision making.

In the present study, the first objective was to find out the work skills performance among students having various degrees of impairment. This can be obtained by comparing the pre and post-test scores data with respect to total vision impaired and low vision students. The data in respect to analysis of pre-test and post-test scores of total samples were obtained before and after treatment. The data analyzed with the help of t-test (*for Equality of Means*) and results are given in table 1(a) below.

Analysis of Work Skills of Students Having Various Degrees of Visual Impairment

The data regarding work skill performance of students having various degrees of visual disabilities were obtained and analysed before and after treatment. The data analyzed with the help of t-test and results are given in table 1(a).

Table 1(a): Analysis of Work Skills of Visual Disabled Students

Type of Students	Testing	No	d.f.	Mean	SD	t- value
Blind	Pretest	96	95	4.20	1.84	61.310**
	Posttest	96	95	17.53	1.49	
Low vision	Pretest	96	95	11.76	2.25	38.265**
	Posttest	96	95	18.40	1.36	

**** Significant at 0.01 level**

The critical table value of 't' for degree of freedom (d.f.) = 95 at 0.01 level of significance is 2.629. From the table 1(a), it is evident that the calculated't' value 61.310 and 38.265 in the work skills of total vision impaired (blind) and low vision students are greater than the critical table value and are significant at 0.01 level. It indicates that in pre-test and post-test scores of work skills of blind and low vision students differ significantly. It means that there was a significant impact of intervention on work skills. In the light of this, the null hypothesis that ***there is no significant difference between pre and posttest of work skills is rejected***. Therefore it is concluded that intervention helped in improving the work skills of both categories of visual disabled students.

Comparison of work skills performances of Students among Total Vision Impaired and Low Vision Students

The second objective was to compare the work skills performance among the total vision impaired and low vision students. This can be obtained by comparing the pre-test & post-test mean performance scores data among students with Total Vision Impairment and Low Vision. The data in respect to analysis of pre-test & post-test scores of total samples were obtained and analysed before and after treatment. The data analyzed with the help of t-test (*for Equality of Means*) and results are given in table-1(b) below.

Table 1(b): Comparison of Pretest & Posttest Scores of Blind and Low vision

Type of students	Testing	No	d.f.	Mean	SD	t- value
Blind	Pretest	96	190	4.20	1.84	25.459**
Low vision	Pretest	96		11.76	2.25	
Blind	Posttest	96	190	17.53	1.49	4.209**
Low vision	Posttest	96		18.40	1.36	

**** Significant at 0.01 level**

The critical table value of't' for degree of freedom (d.f.) = 190 at 0.01 level of significance is 2.602. From the table1(b), it is evident that the calculated't' value 25.459 & 4.209 in comparison of pre-intervention & post-intervention performance scored by blind and low vision students are greater than the critical table value and are significant at 0.01 level. It indicates that pre-test and post-test scores of work skills of Blind and Low vision students differ significantly. In the light of this, the null hypothesis that ***there is no significant difference between pre test and post test of work skills of blind and Low vision students is rejected***. Therefore it is concluded that Low vision students performed better in work skills than blind students before and after providing intervention training to them.

Comparison of Performance of Students with respect to 'Types of School'

The third objective was to compare the work skills performance of students with respect to type of schools (namely, Residential & Inclusive). This can be obtained by comparing mean pre-test & post-test performance scores data among students according to their schools, they are presently studying. The data in respect to Work Skills in 'Special and Inclusive' setup students were obtained before and after treatment. The data analyzed with the help of t-test (*for Equality of Means*) and results are given in table-2 below.

Table 2: Comparison of Performance of Students w.r.t. 'Types of School'

Type of School	Testing	No	d.f	Mean	SD	t- value
Special	Pretest	144	190	6.22	3.45	13.918**
Inclusive	Pretest	48		13.27	1.12	
Special	Post-test	144	190	17.56	1.43	7.324**
Inclusive	Post-test	48		19.17	0.88	

**** Significant at 0.01 level**

The critical table value of't' for degree of freedom (d.f.) = 190 at 0.01 level of significance is 2.629. From the table - 2, it is evident that the t value 13.918 & 7.324 in the comparison of Pre-test scores and Post-test scores with respect to types of school and grade are greater than the critical table value and are significant at 0.01 level. It indicates that pre-test scores and post-test scores for work skills of students presently studying in various special and inclusive schools differ significantly. In the light of this, the null hypothesis *that* ***there is no significant difference between pre-test scores and post-test of work skills of students presently studying in special and inclusive schools is rejected.*** Therefore it is concluded that students studying in inclusive setup showed better work skills performance then their special setup peer group.

Findings of the Study

The findings as per the objectives of the studies are discussed below.

1.0 To find out the work skills performance of students with Total Vision Impairment and Low Vision.

1.1 Intervention helped in improving the work skills of both categories of visual disabled students.

1.2 Low vision students performed better in work skills than blind students before and after providing intervention training to them.

2.0 To compare the work skills performance of students with respect to Type of school (namely, Residential & Inclusive)

2.1 Students studying in inclusive setup showed better work skills performance then their special setup peer group during before and after the treatment.

Conclusion of the Study

The result of the present study indicates a positive performance of basic working skills among totally blind and low vision students. Though low vision students

performed better the totally vision impaired students, it signifies that the intervention programme helped each and every student in improving their basic works skills in all environments. It indicates that, the real problem of blindness is not the loss of eyesight. The real problem is the misunderstanding and lack of information that exists. If a blind person has proper training and opportunity, then blindness can be reduced to a physical nuisance.

References

Aune, B.P & Kroeger, S, A**.** **(**1997). Career development of college students with disabilities: An intersectional approach to defining the issue. *College Student Development*, 38 (4), 344 – 355.

Backer, Harry, J. (1959). *Introduction to exceptional children, 3rd Ed*. New York: Mac Millan Co.

Educational Survey Unit, Survey of Institutions for Physically Handicapped in India – Blind. 1968- 1987. New Delhi: NCERT. 1:561

Edward, T. (1993). *The visual display of quantitative information*. Cheshire, Conn.: Graphics Press.

Garrett, H.E. (1956). *Elementary statistics*. New York: Longmans Green & Co.,

Guilford, J. P. (1965). *Fundamental statistics in psychology and education*. New York: McGraw Hill Book Company,.

Hurlock, E. B. (2014). *Child development. 6th Ed*. Delhi: McGraw Hill Education (India) Ltd., 094, pp: 523 – 554.

Jain, P. (2016): *Curriculum and teaching: D.S.E. (ASD) Manual (R.C.I*). New Delhi: Kanishka Publishers. pp: 79 – 112.

Mangal, S. K. (2017). *Education of exceptional children – An introduction to special education*. Delhi: PHI Learning Private Limited. pp: 178 – 200.

Nayak, A. K. (2016). *Guidance and counseling*. New Delhi: APH Publication. pp: 183 – 204.

Pal, O. (2016). *Educational and vocational guidance and counseling.* New Delhi: APH Corporation, pp: 298- 368.

WHO Report (2012). *Global data on visual impairments 2010*, pp: 1 – 6.

A Study of Perception of Primary Teachers in relation to In-Service Teacher Training Program

Sweta Dvivedi*

Abstract

In-service Teacher Training program is an integral part of teaching at every level. On primary level it is very essential because teachers have to use suitable teaching method as well as they have to pay attention to the learning method also. In basic primary schools this training program is very important and teachers of these basic primary schools receive training from time to time to enhance their teaching techniques and make their teaching effective for students. To get quality education is the fundamental right of every child and for the quality of education; teachers need some teacher training program or refresher course in every school. It boosts the teachers' teaching competency. The present paper discusses about the effectiveness of in-service teachers' training program according to teachers of basic primary schools.

Keywords: *Perception, Primary Teachers, In-Service Teacher Training Program*

Introduction:

The concept of professionalism in teachers is closely associated to their professional development (Evans, 2008). For the professional development of teachers it's needed to update and refresh them. Guskey (2002, P. 381) stated that "high quality professional development is a central component in nearly every modern proposal for improving education. Policy makers increasingly recognize that schools can be no better than the teachers and administrators who work within them". It can be said that primary teachers are foundation pillar of the society because future of the coming generation and also higher education depends on the shoulders of our primary teachers and primary education. "Basic education is of course an issue in all countries, including the industrialized ones. From this initial stage onwards, educational contents should be designed to stimulate a love of learning and knowledge and thus develop the desire and provide the opportunities for learning throughout life." (Delors, 1996, P. 28).

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The development of any nation depends on its educational system. Changing scenario of education needs important changes in education. With these changing taking places, teachers also need to be updated and skilled. Today, so many efforts have been made to achieve the goal of Education for All. Teachers who are expected to cope with a wide range of tasks and demands in such a context are facing the need for defining and re-defining their professionalism and professional development (Day, 2000; Esteve, 2000; Hargreaves, 2000)

To make teachers professionally competent NCTE (1998) has suggested ten vital areas as; contextual, conceptual, content, transactional, educational activities, developing teaching learning material, evaluation, management, working with parents, community and other agencies. Hence, there is need to give in-service teacher training in these areas (Joseph, 2013).

Review of Related Literature

There are various studies has been done on the effectiveness of in-service teacher training program and perception of teachers for it. Sharma (2006) have also indicated many critical points in organization, administration and implementation of in-service training programs that need to be addressed urgently. Pathania (2007) reported that orientation programs were more useful in updating knowledge, improving teaching methods, solving classroom problems and developing professional competence among teachers. Eswaran & Singh (2008) reported in their study that the local specific needs of teachers were not being addressed, Block-Resource Centers were ill-staffed and research studies had not been conducted to determine impact of training on teachers' classroom process. Kappor (2009) had reported in his study that most of the training programs were confronted with the critical issues of little innovation, poor coordination, absence of objectives, unskilled resource persons, absence of evaluation of acquired skills and knowledge as well as absence of follow-up work of training programs.

Need of the Study:

To ensure the right to education we need competent teachers who are skilled with effective teaching methods and techniques. It is a major objective of SSA and RTE to provide education to each and every child with quality. But various studies show that the condition of primary education is very alarming. Achievement of students of these basic primary schools is not satisfactory (Aggarwal 1998, Report of Pratham 2008, 2009, 2012, 2013, UNESCO 2009, Dvivedi & Singh 2013). It indicates that SSA is not providing the desired dividends. This scheme deters from the track of quality education. Reports of DISE indicate that significant inputs are being made such as expansion of every possible infrastructure facilities in schools as well as teaching work-force by para-teachers and regular teachers; induction training of

para-teachers, in-service education of para-teachers and regular teachers on a continuing basis every year; and setting up of in-service training centres. But the outcome is not pleasing yet. So the investigators felt the need to assess the effectiveness of in-service teacher training program and perception of basic primary teachers for it.

Objectives of the Study:

Objectives of this study are as follows;

- To study the perception of basic government primary teachers concerning in-service teacher training program.

Population and Sample:

Target population of this study was identified as all government teachers of primary schools of Varanasi district. On this population the results of the study was to be generalized. The sample size of the study was 40. There are total 8 blocks in Varanasi district (Arajiline, Baragaon, Chirai Gaon, Cholapur, Harahua, Kashi Vidyapeeth, Pindra and Sevapuri). Investigator selected five basic primary teachers from each block. It had been also ensured by the investigator that each block has teachers from all respective disciplines listed in the sample frame.

Instrument for Collection of Data:

For the collection of data an interview schedule was developed by the investigator. In the interview schedule there were total 16 questions. Some questions were close ended and some questions were open ended according to nature of the study.

Interview schedule was shared with 12 experts who were trainers, lecturers of DIET, teacher educators and teacher of primary schools to review the tool and get some important suggestions. It was also important to know from the experts' point of view that the interview schedule contained sufficient items to assess the perception of teachers about in-service training program.

Procedure of Data Collection:

This interview schedule was administered on 40 teachers of governmental primary schools. The investigator personally visited each teacher and interviewed them. The data obtained from the interviews were summarized and coded descriptively to identify the perceptions of teachers about in-service teacher training program.

Findings of the Study:

- All teachers (100 per cent) had attended the in-service teacher training program. *Samvaad* (which was directly related to Right of Education) and CCE (Continuous and Comprehensive Evaluation) which were essential for

all teachers. Hence each teacher has received training in these training programs.

- 72.5 per cent teachers reported that they had attended at least 4 training program in an academic year and rest of 27.5 per cent teachers reported that they had attended more than 7 programs in an academic year.
- 80 per cent teachers reported that they had attended approximately 6 training programs in two successive academic years and other 20 per cent had attended approximately 11-12 training programs in two successive years.
- More than 90 per cent teachers did not want to attend in-service teacher training program because according to them this was only wastage of time. Their trainers didn't provide them useful training as per their needs. Teachers stated that they only sat during the training sessions. According to them this was only wastage of government funds and the precious time of teachers.
- 77.5 per cent teachers reported that the training content of the programs they underwent was not adequate and training was not according to their all professional purposes whereas 22.5 per cent teachers reported that the training content was adequate and it was helpful for their professional purposes.
- For implementation of learned skill or technique in the class room 82.5 per cent teachers reported that they implemented that skill and techniques after the program. But in later period they did not apply the learnt skill or technique. 12.5 per cent teachers stated that they used the learnt method, skills or technique regularly. But 5 per cent teachers reported that they had never used that technique or skill in classroom because it was not feasible and it could not be implemented in the classroom.
- Teachers uttered that headmaster choose teachers according to their discipline but if in the school, the teacher of particular discipline is not on hand, he may send any teacher of other discipline because in primary schools teachers are expected to teach every subject. Often, headmasters try to send different teachers for different training programs but all time it is not exact. So many times it is like as retribution of headmasters for those who are not in their favored list.
- Teachers reported that they received training in various dimension which can be useful in their classroom as; inclusion of special students, continuous and comprehensive evaluation, implementation of RTE in schools, learning by doing, use of demonstration method in classroom, use of learning method

besides teaching method like excursion method, play way method etc. but it does not enhance their teaching skill because they get information on knowledge level not on application level..

- Teachers were not very much satisfied with the training programs. They accepted that they received training on regular interval but this program is not effective. 95 per cent teachers reported that every time the theme of training effective but the resource persons did not provide training effectively. They did not use appropriate transitional approaches. They gave only theoretical information about the theme and not its classroom implications. Teachers expressed that those information that they got in training session were familiar.
- Only 5 per cent teachers of Varanasi admitted that their teaching technique had improved after training, rest 95 per cent teachers did not agree with this.
- All teachers admitted that there was not extra time in time-table to use the learnt techniques in the classroom. Some techniques/methods take time especially the learning methods. They reported that they had pressure to finish their syllabus in given time along with other duties which were not academic. They admitted that if they got extra-time in time table they could use teaching-learning methods effectively in the classroom.
- A major barrier was the lack of finance also. All 100 per cent teachers reported that they were unable to use some methods in absence of finance for example-excursion method. Any primary school doesn't get any financial support from the government to use this method, so the teachers were unable to use this. As well as now the schools don't get amount to purchase teaching-learning materials. In this condition they can use only those materials which are already in the school and if the material is not available in the school they can't use that. Other barriers were non-cooperation of other teachers/headmasters, criticizing behavior of teacher/headmasters and work-load.
- There was a weird situation also which was reported by 55 per cent teachers that when they use new method or technique in the classroom, attendance of students in the classroom decreases which shows lack of interest in students. But 100 per cent teachers also admitted that present students show very much interest in learning when they use any new technique/method/strategy and students also learn that content easily.
- Teachers (100 per cent) reported that they need a follow-up program because often they face some problems in classroom execution but there is not any

follow-up program run by DIET to know the impediment of teachers in application.

- 100 per cent teachers also agreed with it that there should be any supervising body to ensure the impact of in-service training program but it is the drawback that there is not any monitoring body to determine the impact of in-service education on teachers classroom processes.

Conclusion:

On the basis of above findings it can be said that the teachers of basic schools find the concept of in-service teacher training program good for them. Various areas and themes, on which these teaching programs were organized by the state government, were adequate. Number of training programs was also sufficient. These programs were regularly organised and teachers were trained in any specific area from time to time. It is also good that headmasters send teachers for in-service training according to the area of training and disciplines of teachers. But the negative point of training program was that there was no practical implication of the training program. Often it did not satisfy the objectives of classroom teaching as well as the aims of teachers. The reasons behind it might be related to resource persons/trainers such as inefficiency of resource persons/trainers, their faulty transactional approach, unprofessional behaviour and faulty training techniques. Other problems related to classroom implication were perception of colleagues and head-teachers about training program, behaviour of colleagues, lack of time in time-table, other non-academic burden of teachers, lack of finance, and absence of monitoring committee/body. By removing these barriers; in-service teacher training program can be successful and teachers can be able to use the learnt techniques in the classrooms and it will affect learning of students positively because it had been stated by teachers that 'students learn rapidly with the help of new methods/techniques because it makes teaching-learning process interesting and child oriented and class becomes dynamic'.

Suggestions:

To improve the condition of in-service teacher training program some suggestions have been mentioned underneath;

- Very limited percentage of teachers reported that the in-service teacher training program was relevant. Therefore; an immediate action is required on the part of state government or regulating body. They should conduct need assess studies of teachers with a view to rendering the training content relevant to their professional and learning needs.

- Basic education department should conduct studies with a view to determine the impact of in-service training program of teachers on their classroom processes and outcome of the programs in term of learning achievement of students.
- Teachers reported that the transactional approach used by trainers was not appropriate so there is a need to improve the transactional approaches being used by trainers of DIET.
- An initiative should be taken by DIET to motivate primary teachers to undertake action research in order to solve academic problems being faced by them in the classroom.
- There should be a monitoring committee to monitor the training session.
- Strong monitoring mechanism need to be developed at the institution level also in particular, block and the cluster level in general to identify and resolve the issues on the spot.
- The training should be in related to the needs and requirements of teachers and schools.
- A practical session also should be organized in the training programs so as to clear the doubts of the trainees on the spot.
- A feedback and follow-up program should be done to assess the problem in implementation and improvement in coming training programs.
- The resource person/trainer should have mastery over the subject of their respective field. The selection criteria should be very rigorous for the appointment of resource-persons/trainers.

References:

Aggarwal, Y.P. (1998). *Primary education in Delhi: How much do the children learn?* New Delhi: National Institute of Educational Planning and Administration (NIEPA).

Day, C. (2000). Teachers in the twenty – first century: Time to renew the vision [1]. *Teachers and Teaching: Theory and Practice*, 6 (1), 101-115, August. Retrieved from http://dx.doi.org/10.1080/135406000114771

Delors, J. (1996). *Learning: The treasure within: Report to UNESCO of the International Commission on Education for the twenty first century*. Paris: UNESCO.

Dvivedi, S. & Singh M. (2013). An assessment of students' proficiency in mathematics: A case of Varanasi city. *National Journal of Education*, 12(1), 91-99, July.

Esteve, J.M. (2000). The transformation of the teachers' role at the end of the twentieth century: New challenges for the future. *Educational Review*, 52(2) 197-207, July. Retrieved from http://dx.doi.org/10.1080/713664040.

Eswaran, S. & Singh, A. (2008). *A study of effectiveness of in-service education of teachers*. New Delhi: All India Primary Teachers' Federation. Retrieved from http://download.ei-ie.org/Docs/WebDepot/AIPTF_India_Effectiveness%20of%20Iin-Service%20Training_08_EFAIDS.pdf

Evans, L. (2008). Professionalism, professionality and the development of education professionals. *British Journal of Educational Studies*, 56(1), 20-38, March. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8527.2007.00392.x/epdf

Guskey, T.R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3/4), 381-391, Retrieved from https://deltalearns.ca/leadingforlearning/files/2014/05/ProDTeacherChangeGuskey.pdf

Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching: Theory and Practice*, 6(2), 151-182, August. Retrieved from http://dx.doi.org/10.1080/713698714

Joseph, B. (2013). *Teacher effectiveness and professional competency among higher secondary school teachers in Kottayam District, Kerala.* (Unpublished Doctoral Thesis, Andhra University, Visakhapatnam.)

Kapoor, D.R. (2009). *Dynamics of learning organizations*. New Delhi: Regal Publications.

Pathania, K. S. (2007). Attitudinal study of the teachers towards orientation schemes of UGC. *University News*, 45(39), 14-18, September.

Pratham (2008). *Annual status of education report (rural): Provisional.* New Delhi: ASER .

Pratham (2009). *Annual status of education report (rural): Provisional.* New Delhi: ASER . Pratham (2012). *Annual status of education report (rural): Provisional.* New Delhi: ASER . Pratham (2013). *Annual status of education report (rural): Provisional.* New Delhi: ASER . Sharma, J. P. (2006). Training and development of the academic staff. *University News*, 44(11), 1-2, March.

UNESCO, (2009). *EFA global monitoring report 2009: Education for All: Overcoming inequality: Why governance matters*. Paris:UNESCO.

Perceptual Learning Styles of Private Higher Secondary Schools in Relation to Gender in Aizawl City

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Abstract

Individual learning styles depend on cognitive, emotional and environmental factors, as well as one's prior experience. In other words, everyone is different. It is important for educators to understand the differences in their students' learning styles, so that they can implement best practice strategies into their daily activities, curriculum and assessments. This study was undertaken with the objective to compare the Perceptual Learning Styles preferences of male and female students of private higher secondary schools in Aizawl city. The scale used for this study is Perceptual Learning Style Preference Questionnaire constructed by Joy Reid (1984). The data from the present study has been collected from 2 Private Higher Secondary schools. The sample consists of 192 students, with 96 from Oikos Higher Secondary School and Providence Higher Secondary Schools. Findings showed that there is no difference between male and female on the different Perceptual Learning Styles which are visual, auditory, kinaesthetic, tactile, group and individual.

Key Words: Learning styles, Perceptual learning syles, Preference, and Private Higher Secondary Schools.

Introduction

The term "learning styles" implies to the understanding of the fact that every student learns differently. Technically, an individual's learning style refers to the preferential way in which a student absorbs processes, comprehends and retains information. For example, when learning how to build a clock, some students understand the process by following verbal instructions, while others have to physically manipulate the clock themselves. This notion of individualized learning styles has gained

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widespread recognition in educational theory and classroom management strategy. "Learning style" refers to how an individual responds to the learning environment (Claxton & Ralston, 1978; Wooldridge, 1995). Dunn and Griggs (2000) describe learning style as the way an individual begins to concentrate on, process, internalize, and remember new information and skills.

Perceptual Learning Styles are the means by which learners extract information from their surroundings through the use of their five senses. Individuals have different "pathways" that are specific to them. When information enters that "pathway" the data is retained in short term memory. Repeated exposure and use promote retention in long term memory. Perceptual learning style is also referred to as sensory learning style and is concerned with the involvement of the learner's sense organs in the process of learning, such as eyes and ears. Learners employ their sense organs to process the stimuli from outside. There are five styles, namely, visual learning (learn by seeing), auditory (learn by hearing), reading/writing (learn by processing text), tactile learners (learn by touching), and kinaesthetic learning/practical learning (learn by doing).

Rationale of the Study

It is important to understand learning styles so to ensure that tutors are giving instructions according to the learner's style of learning. A tutor who instructs according to his own style makes learning more difficult for the learner.

This study is necessary for tutors as they should know about learning styles so as to be able to help learners identify their personal learning styles and build self-confidence to learn to manage their own learning.

It is a known fact that most teachers tend to teach in the way they were taught or in the way they preferred to learn. Sometimes conflicts might arise because of a mismatch between the teacher's teaching style and learner's learning styles, which might have negative consequences both on the part of the learner and teacher. For this reason, Stebbins (1995) stated that teachers should know the general learning style profiles of the whole class, which will enable them to organize and employ instructional materials accordingly. Raising student's awareness regarding their learning styles and strategies might make them not only more prepared for learning but also more analytic about their learning styles and the strategies they make use of. Reid (1995) states that developing an understanding of learning environments and styles will enable students to take control of their learning and to maximize their potential for learning" (p. xiv). This study can also help parents know their children's learning styles so as to help them to be more equipped to teach them.

There are many advantages of identifying learning styles. Learning style has an important place in the lives of individuals. When the individual knows his learning style, he will integrate it in the process of learning so that she/he will learn more easily and rapidly and will be successful. Another advantage of the identification of the own learning style by the student is that it will help the student to become an effective problem solver. The more successful the individual is at solving the problems he faces, the more control he will have over his own life (Biggs, 2001). It is important that individuals receive education in areas suitable for their learning styles. A person educated in an area having no relationship to his/her learning style may lack confidence and she/he may be less successful and become frustrated.

Knowledge of learning style also provides information to the student as to why he has learnt in a different way than others. It helps to control the process of learning. It is vital because one of the most important signals in learning is to learn to be autonomous, that is, for the individual to take responsibility for his own learning. Because of this, he should know what learning style is. Briefly, confidence in learning will consistently rise when learners know how to learn. Learning to learn and grasping knowledge in a suitable manner will lessen the need for an overbearing control by teachers. At this point, teachers merely act as guides. The students take responsibility for their learning and everything is under their control. They search answers to the problems and benefit from their unique performances and preferences in their learning styles. The students will identify their aims, unlike those whose learning style preferences are not identified. They know what they want to learn and "how." This awareness will change their perspectives on learning new things.

The need of the study of Perceptual Learning Styles of students emerges from the lack of in-depth research on learning styles. There has always been absence of information and awareness on the kind of learning strategies to be adopted by the students. The absence of efforts of an educational system to identify learner's styles and strategies not only in India as a whole but in Aizwal city in particular, has created the need for a study of this kind.

This study is crucial for identification of one's own learning style as well as for teachers to enable them to employ suitable methods and strategies for better achievement of the learners. Hence, it is the need of the hour to conduct this study and it has been taken up.

Objective of the Study

The objective of the study is to compare the Perceptual Learning Styles of male with female students.

Research Question

Is there any difference in Perceptual Learning Styles between males and females students of Private Higher Secondary schools?

Hypothesis of the Study

There is no significant difference in Perceptual Learning Styles between males and females.

Method of the Study

The present study has adopted a descriptive research.

Population of the Study

The population of the study is Private Higher Secondary schools of Aizawl which have all the Arts, Science and Commerce streams.

Sample of the Study

The data for the present study is collected from 2 Private Secondary schools- Oikos Higher Secondary School and Providence Higher Secondary School which have all the Science, Arts and Commerce streams. A total of 192 students, 96 each from both schools were randomly selected for the study.

Tools

The scale used for this research is Perceptual Learning Style Preference Questionnaire constructed by Joy Reid (1984). This questionnaire consisted of 30 questions measuring 6 learning categories such as Visual, Tactile, Auditory, Group, Kinesthetic and Individual.

Data Collection

The investigator personally visited the schools and permission was taken from the Principals of the schools to collect the required data. Confidentiality was assured.

Data Analysis

The collected data was analyzed by employing t-test to compare the Perceptual Learning Styles of male and female students.

Analysis and Interpretation of the Study

The collected data were carefully analyzed and interpreted based on the objective of the study which are presented in the following:

Table 1: Scores of different Learning Styles of Males and Females

Table 1.1: Visual

	N	Mean	SD	SEM	t-value	t-tabulated value
Male	96	35.8	4.65	0.47	**0.67**	1.97
Female	96	36.3	5.17	0.52		

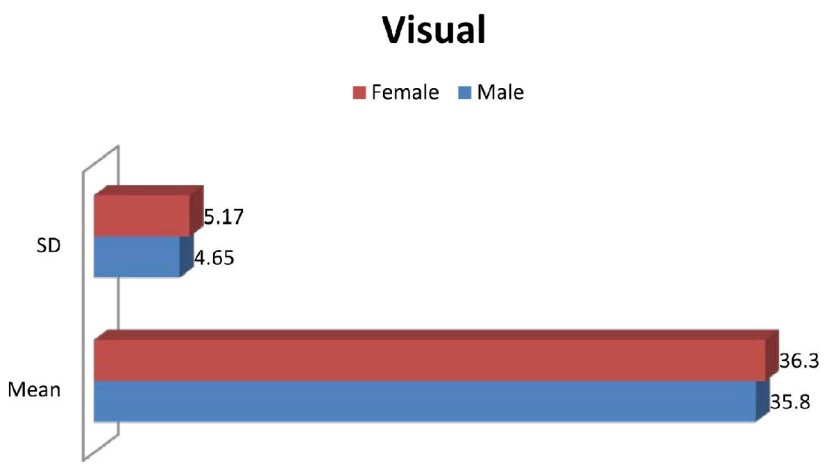

Figure 1.1 (a): Bar graph showing Mean and SD of male and female on Visual Perceptual Learning Style

As per table 1.1, it is found that the female students score is slightly higher with a mean of 36.3 (SD=5.17) compared to male students with the mean of 35.8 (SD=4.6) in this learning style.

Further, it was also found that the t-value is found to be **0.67.** The hypothesis that there is there is no difference in Perceptual Learning Styles between males and females on Visual Learning Style Preference is thereby accepted.

1.2: Auditory

	N	Mean	SD	SEM	t-value	t-tabulated value
Male	96	37.83	5.37	0.54	**0.27**	1.97
Female	96	38.04	5.13	0.52		

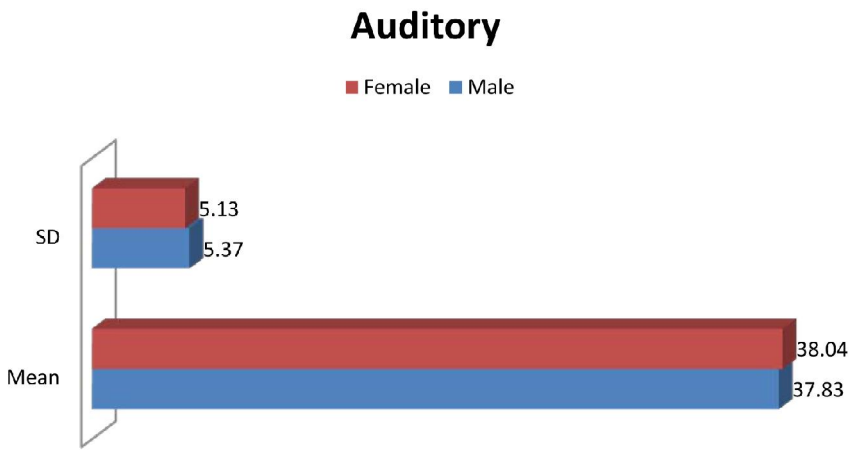

Figure 1.2 (b): Bar graph showing Mean and SD of male and female on Auditory Perceptual Learning Style

It is found vide Table 1.2 that the mean of female students is also slightly higher with 38.04 (SD=5.13) than the mean of male students of 37.83 (SD=5.37) on Audio Learning Style.

Further, it is also found that the t-value is **0.27**. This indicates that the hypothesis is accepted, i.e. there is no difference in Perceptual Learning Styles between males and females on Audio Learning style preference.

1.3: Kinaesthetic

	N	Mean	SD	SEM	t-value	t-tabulated value
Male	96	35.85	6.19	0.63	**0.72**	1.97
Female	96	35.22	5.65	0.57		

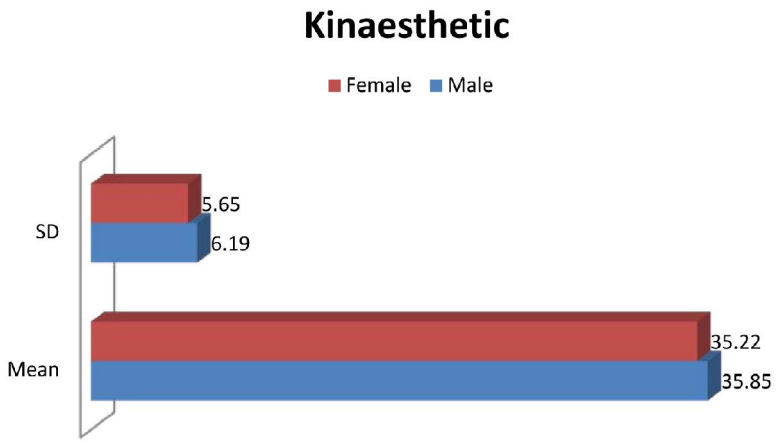

Figure 1.3 (c): Bar graph showing Mean and SD of male and female on Kinaesthetic Perceptual Learning Style

An examination of date vide Table 1.3 shows that the means of male and female students are found to be 35.85 (SD=6.19) and 35.22 (SD=5.65) respectively. The mean of male students is slightly Higher in this learning style.

The t-value is further found to be **0.72**. Therefore, the hypothesis is also accepted in this area indicating that there is no difference in the Perceptual Learning Styles between males and females on Kinaesthetic Learning style preference.

1.4: Tactile

	N	Mean	SD	SEM	t-value	t-tabulated value
Male	96	34.64	6.25	0.63	**0.29**	1.97
Female	96	34.91	6.50	0.66		

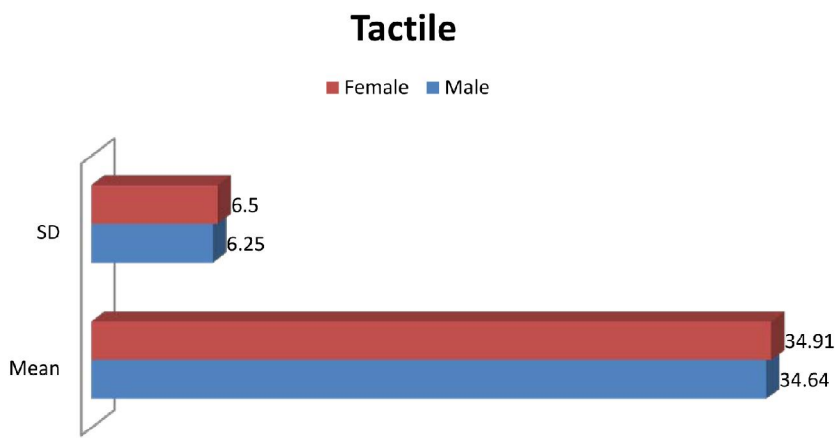

Figure 1.4 (d): Bar graph showing Mean and SD of male and female on Tactile Perceptual Learning Style

A quick glance at Table 1.4 reveals that the means of male and female students are 34.64 (SD=6.25) and 34.91 (SD=6.50) respectively with the slight Higher mean of female in this learning style.

Further, the t-value is **0.29**. Therefore, the hypothesis of "there is no difference between male and female" in the area of Tactile Perceptual Learning Style is also accepted.

1.5: Group

	N	Mean	SD	SEM	t-value	t-tabulated value
Male	96	31.18	5.67	0.71	**0.45**	1.97
Female	96	31.66	7.51	0.77		

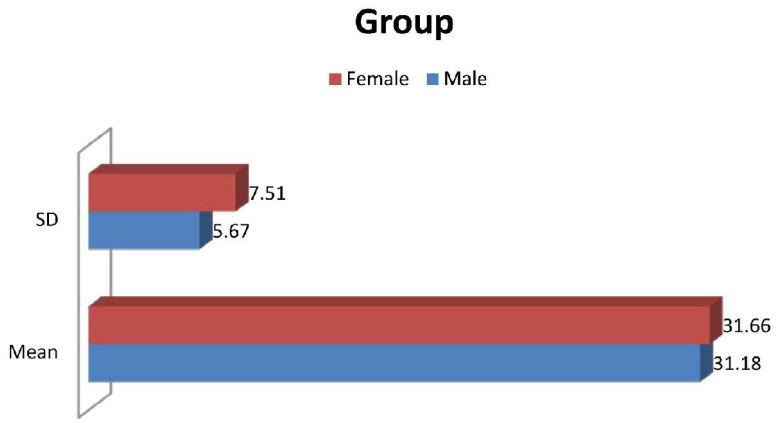

Figure 1.5 (e): Bar graph showing Mean and SD of male and female on Group Perceptual Learning Style

A critical analysis of Table 1.5 shows that the mean of male students is 31.18 (SD=5.67) and the mean of female is 31.66 (SD=7.51).

Further, the t-value is found to be **0.45** which shows no significant difference on perceptual style preference between male and female on this area. The hypothesis, is therefore, accepted.

1.6: Individual

	N	Mean	SD	SEM	t-value	t-tabulated value
Male	96	36.06	6.70	0.68	**0.36**	1.97
Female	96	36.42	7.09	0.72		

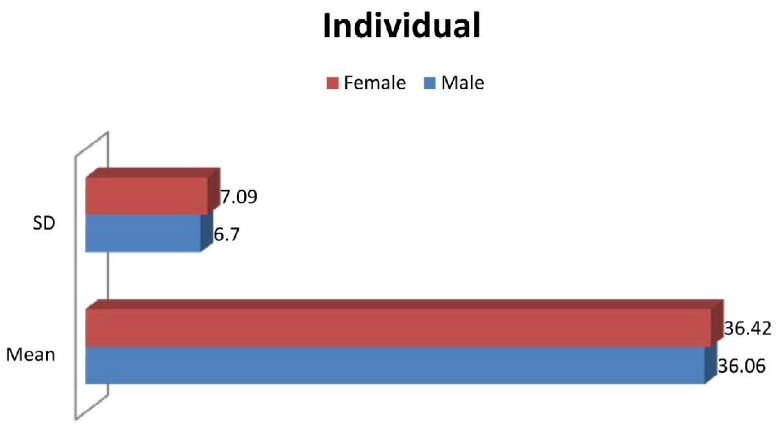

Figure 1.6 (f): Bar graph showing Mean and SD of male and female on Individual Perceptual Learning Style

It is found vide Table 1.6 that the mean for male and female are 36.06 (SD=6.70) and 36.42 (SD=7.09) respectively.

The t-value is further found to be **0.36**. This indicates that the hypothesis is also accepted on this area i.e. there is no difference between male and female on Individual Perceptual Learning Style.

The above shows the comparison of six different Perceptual Learning Styles of male with female students. After careful analysis, it has been found that there is no difference between male and female on the different Perceptual Learning Styles which are visual, audio, kinaesthetic, tactile, group and individual.

Discussion

In analyzing the scores of different learning styles- Visual, Auditory, Kinaesthetic, Tactile, Group and Individual of all the students based on gender, it has been found that there is no significant difference male and female. Few studies have been carried out by researchers who also concluded that there is no difference on learning styles and gender. This finding is supported by Caskey (1981) who did not find significant sex differences in learning styles of community college students as measured by Kolb's Learning Inventory. Another study by Reistroffer (1997) is also in tune with the present finding as there was no statistical significant difference in learning style score for men and women on Kolb's learning style inventory.

At the same time, Whitcomb (1999) in a study found that there were significantly gender differences in learning style preferences with men being more abstract, while women preferred more concreteness. Lim Yuen Lie and Lisa-Angelique (2004) also

reported that males scored slightly higher than females on learning styles as measured through Biggs' SLQ. Mulalic, et. al. (2009) has also explored the Perceptual Learning Styles of students in Malaysia and found significant difference in learning styles between male and female students regarding auditory and kinaesthetic learning styles. Male students favoured kinaesthetic and auditory learning when compared with the females. A study by Saleh A. Al Khatib and Shadia K. Ghosheh (2013) also contradicted to the present study revealing that there were significant differences in learning styles according to gender.

Therefore, teachers and experts and those who are responsible in planning the curriculum for Secondary schools have to bear in mind that students learn in various ways and dimensions. Teachers should be aware that students who are of different backgrounds or social economy status have different preference towards two or more learning styles.

Suggestions

1) Teachers need to take into account their student's diverse learning styles, design instructional methods that take care of those diversities and remain sensitive of such during the instruction process. School administrators need to provide various learning materials which can bring diversity in the classroom by employing visual, auditory and kinaesthetic, tactile, group and individual materials such as use of technology and student's project writing and presentation among other methods.

2) Teachers should also help their students to understand their learning style preferences and make use of such to develop life-long learners.

3) It is also suggested that the relationship between learning styles and teaching styles should be further explored in order to improve the educational experiences of students and maximize educational outcomes.

With these suggestions, the knowledge of learning styles of the students can help teachers see clearly which learning styles they can employ for their students in their schools.

Conclusion

The finding of the present study reveals that there is no significant difference between the scores of different perceptual learning styles and gender.

A better knowledge and understanding of learning styles may become important as classroom sizes increase and as technological advances continue to mold the types of students entering higher education. While research in this area continues to grow, teachers should make concentrated efforts to teach in a multi-style fashion that both

reaches the greatest extent of students in a given class and challenges all students to grow as learners. It is very important to understand and explore each individual's learning style. Analyzing one's own particular learning style can be very helpful and beneficial to the student by aiding them in becoming more focused on an attentive learner, which ultimately will increase educational success. Discovering this learning style will allow the student to determine his or her own personal strengths and weaknesses and learn from them. Teachers can incorporate learning styles into their classroom by identifying the learning styles of each of their students, matching teaching style to learning style for difficult tasks, strengthening weaker learning styles through easier tasks and drill, and teaching students, learning-style selection strategies. The purpose of using learning styles is to find the best ways for both students to learn effectively and teachers to teach efficiently.

It can be concluded that determining students learning styles will help and contribute a lot to the learning process. In order to provide suitable learning atmosphere and provide better teaching procedure it is necessary for teachers to identify the strengths and weaknesses of the learners and guide them according to student's potential and capabilities.

References

Biggs, J. (2001). Enhancing learning: A matter of style or approach? Perspectives on thinking, learning and cognitive styles, In R. J. Sternberg & L. F. Zhang (Eds.). *Perspectives on thinking, learning and cognitive styles.* New Jersy: Mahwah, Lawrance Erlbaum Associates.

Caskey, S.L. (1981) A study of cognitive style and selected attribute variables of community college students. Unpublished Doctoral Dissertation.

Claxton, D. S., & Ralston, Y. (1978). *Learning styles: The impact on teaching and administration* (Research Report No. 10). Washington, DC: American Association of Higher Education.

Dunn, R. , Dunn, K. & Price. (1975, 1979, 1981, 1989*). Learning style inventory*. Lawrence Kansas: Price Systems.

Dunn, R. & Griggs, S. A. (Eds.). (2000, 2004). *Synthesis of the Dunn and Dunn learning-style model research: Who, what, when, where, and so what?* New York: St. John's University's Center for the Study of Learning and Teaching Styles.

Ileris, K. (2001 April). Transformative learning in the perspective of a comprehensive learning theory. *Journal of Transformative Education* (2): 79–89. doi:10.1177/1541344603262315.

Lim Yuen, Lisa – Angelique. (2004). How do male and female students approach learning at NUS? *CDTL*, Vol. 7(1).

Mulalic, A., Mohd Shah, P., & Ahmad, F. (2009). Perceptual learning styles of ESL students. *Journal of Social Sciences,* 7 (3), 101-113.

Ormrod, J. (1995). *Educational psychology: Principles and applications.* Englewood Cliffs, NJ: Prentice-Hall.

Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21 (1), 87-111.

Reid, J. M. (Ed.). (1995). Preface. In J. Reid (Ed.). *Learning styles in the ESL/EFL classroom*. (pp. viii- xvii). New York: Heinle and Heinle Publishers.

Reid, J. M. (Ed.). (1998). *Perceptual learning style preference survey and understanding learning styles in the second language classroom*. (pp.162-167). USA: Prentice Hall Regents.

Saleh A. Al Khatib & Shadia K. Ghosheh (2013). Perceptual Learning style Preferences in Relation to Gender, Academic Achievement and Field of Study among a Sample of UAE College Students. *Scholars Journal of Arts, Humanities and Social Sciences.*

Stebbins, C. (1995). Culture-specific perceptual – learning – style preferences of postsecondary students of English as a second language. In J. M. Reid (Ed*). Learning styles in the ESL/EFL classroom*. Boston: Heinle amd Heinle Publishers.

Whitcomb, R.M. (1999) The relationship between student cognitive development and learning style preference. *DAI*, 2000, Vol. 61(1), 110- A.

Woodridge, B. (1995). Increasing the effectiveness of university/college instruction: integrating the results of learning style research into course design and delivery. In R.R. Sims & S. J. Sims (Eds.), *The importance of learning styles* (pp. 49- 67). Westport, CT: Greenwood Press.

Synergising Distance Education and ICT: A Study of the State of Meghalaya, India

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Isagahah Lawrniang**

Abstract

The purpose of this paper is to examine the use of ICT and mixed technology as ontology for self and distance learning in the state of Meghalaya in North East India. The points of reference are the population of the state, the men/women ratio, gender ratio of learners, the tele-density of the state, the number of colleges and the rural urban divide. Data and statistics are taken from secondary sources. The paper highlights the specific use of mixed technologies to address the new breed of learners today; a hybrid of text and hypertext: the digital learner, with his or her penchant for technology and the mobile phone. Distance Education is now gradually merging with online ontology of teaching/learning. The paper has come up with suggestions for improving delivery of educational services in the state of Meghalaya, in North East India. The originality/value lies in the cross currents of using technology for learning in the midst of the rural urban divide, strongly advocating the course of Digital Learners in a state of India besotted with poor road connectivity and envisaging mixed technologies: the computer, radio and the mobile phone as integrated methods of learning.

Keywords: *Distance education, ICT and Meghalaya.*

Introduction

The paper is based on the premise that apart from Shillong and Tura all the other Learner Support Centres of IGNOU, Shillong are located in rural or semi urban places in the state. Some, like Mendipathar in East Garo Hills and Umsning and Nongpoh, in Ri-Bhoi district of Meghalaya are situated in highways connecting Meghalaya to Assam. The rural penetration of the University has taken education to remote and intractable areas of the state. When road connectivity has bottlenecks, Information and

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Communication Technologies play the pivotal role of taking education to the learner, rather than the latter moving from place to place.

The University is planning to establish Digital Learning centres in every state of the country in collaboration with the Ministry of Information and Technology, beyond the district levels to the block levels. Moreover online learning will be integrated with FM Radio (GyanVani), Television (GyanDarshan,DTH) and webcasts on the computer. The new age learner today is the mobile learner with apps and smart phones. Such educational technology must be optimally used to penetrate the rural sectors of the state, in this case Meghalaya which can serve as a model for other states in North Eastern India which face similar problems of communication network and are underdeveloped, plagued also with social unrest, intermittent calls for bandhs by militant and socio-political groups etc.

The paper has attempted to show how Distance and Open Learning can integrate systems through an integrated use of technologies, bringing diverse strands of educational networks: schools, colleges and universities on common footing. But, the crux is that of penetration – penetrating rural areas, thereby attenuating rural urban divides and connecting with communities. Technology will be the catalyst and exacerbating factor here. The presence of over 200 Common Service Centres in all districts of the state is already examples of access to information, governance administration in the state. The point to note is that Distance Learning is an integration of educational realities: print, radio, television, computers, mobile phones all of which are complementary and interact upon one another.

The paper envisages such a model outlook, perforce in rural areas where the strength of our learner population lies. Building educational strategies by processes of connecting, unifying multiple layers; creating structure and edifice unilaterally is the salutary purpose of education taking it to underprivileged categories and tribal people. This is nation building and integration of community layers. Distance and Open Learning is inherently geared towards the isolated learner. Telecommunication networks in a small state with only 2.8 million population, landlocked, will build a structure for education by connecting dispersed communities, from online admission to technology abetted learning styles ranging from orthodox to preferential: audio, video, visual learning, mobile learning etc. a seamless model of learning – pick, choose, experiment etc geared towards the infinite pleasures of learning where teacher and taught are one. Engaging rural people with an autonomously modelled perception of education is also to achieve some palpable realities in rural areas: adult education, continuing education and lifelong learning. This is happening in cities, but what about the interiority of rural/semi rural areas? Education can train work forces there and give that elusive chance to dropouts.

Background

Meghalaya is one of the 'seven sisters' of North East India. The state is blessed with abundant natural resources and pleasant climatic conditions. It comprises of the Khasi Hills, Jaintia Hills and Garo Hills partitioned into 11 districts. It shares a 443 Kilometres long border with Bangladesh and the rest with Assam. The state is connected by four national highways viz. NH-06, NH-106, NH-206 and NH-217 toother states of the North East Region.

The original inhabitants of the state are the Khasis, Garos and Jaintias. English is the official language of the state whereas Khasi, Garo and Pnar are the other principal languages for communication. People follow the matrilineal practice where descent is traced through the mother. In fact the 2011 census shows that in East Khasi Hills and Jaintia hills the number of females per thousand males is 1008 (see table 1). The young daughter of the family acts as the trustee of wealth and property. Traditionally only the male member of the family participates in the political affairs, however as seen in the current context women freely take part in politics. Meghalayans are liberal and are known to adapt to changes.

Rank	District	Persons	Sex ratio
0	Meghalaya	29,66,889	986
1	East Khasi Hills	8,25,922	1008
2	West Khasi Hills	3,83,461	981
3	RiBhoi	2,58,840	951
4	East Garo Hills	3,17,917	968
5	South Garo Hills	1,42,334	944
6	West Garo Hills	6,43,291	979
7	Jaintia Hills	3,95,124	1008

Table: 1 Population and sex ratio 2011 census

The history of formal education and schooling begins with the formation of Khasi alphabets by Thomas Jones in1842 and Garo alphabets in 1902 by American Missionaries. The first college was established in 1924 by the ChristianBrothers of Ireland. Now the state has one central university, the North Eastern Hill University (NEHU), the prestigious Indian Institute of Management (IIM), Shillong, the National Institute of technology (NIT), National Institute of Fashion Technology (NIFT), Indian Institute of Hotel Management (IHM),and Indira Gandhi National Open University (IGNOU). The Indira Gandhi National Open University (IGNOU)through its Regional Centre Shillong is the only university which is offeringhigher education throughthe distance mode apart from other private universities.

Rank	District	Literacy rate	Male	Female
0	Meghalaya	75.48	77.17	73.18
1	East Khasi Hills	84.7	85.26	84.15
2	West Khasi Hills	79.3	80.29	78.3
3	RiBhoi	77.22	79.56	75.85
4	East Garo Hills	75.51	78.52	71.32
5	South Garo Hills	72.39	76.77	67.72
6	West Garo Hills	68.38	73.31	66.71
7	Jaintia Hills	63.26	59.75	63.34

Table: 2 Literacy rate of Meghalaya-District Wise

As per the 2011 census Meghalaya records a literacy rate of 73.18 %,four new districts were created subsequently. Due to non-availability of solid data, data of 2011 is used. It more or less depicts the trend of literacy rate in each district. The lowest literacy rate is recorded in Jaintia Hills. This shows the percentage of those who have never been to school or up to the elementary level. The percentage of those who successfully completed up to Class X is further small. In order to include those dropouts in the education system, IGNOU had come up with a bridge course, the Bachelor Preparatory Program (BPP) which allows direct admission into Bachelor degrees program without the requirement of passing Class X or Class XII.

State of Higher Education in Meghalaya

Higher Education is provided mainly by colleges spreading across districts of the state. The spread of colleges and types are indicated in table below.

District	Number of Govt. Colleges	Private colleges under Deficit in AID	Private colleges under Adhoc Grant in aid	Private college under Lump sum Grant in Aid
Meghalaya	6	14	7	7
East Khasi Hills	1	10	1	2
West Khasi Hills	0	1	2	0
RiBhoi	0	2	0	0
East Garo Hills	1	1	0	0
South Garo Hills	1	0	0	0
West Garo Hills	2	1	3	3
Jaintia Hills	1	0	1	2

Table: 3 Spread of Educational institutions across districts of Meghalaya

Data shows that most of institutions/colleges are concentrated in the state capital, Shillong and few in the district Headquarters. There are no government colleges in West Khasi Hills and Ribhoi districts. Considering the fact that West Garo Hills is the fourth highest in terms of population, the scope for opening new institutes or coverage through open and distance learning using ICTis ample.

Age Group (in years)	Rural	Urban	Average
11-Jul	7.27	2.59	4.93
14-Dec	14.71	13.94	14.32
15-18	47.91	29.52	38.7
19-25	86.46	60.19	73.3

Table 4: Proportion of Population not attending Educational Institutions by Areas (2004-05) (in %)

Data showsthat for the year 2004-05 an average of about 73.3 % in the age group 19-25 were not attending any educational institution. This means about 27 % were in colleges/universities/educational institutions. It is here in such situations that Open And Distance Learning, which is technology abetted can fill the void.

As per 2011 census **literacy rate** is the total percentage of the population of an area at a particular time,of age seven years or above who can read and write, with understanding

As the percentage of population in rural areas not attending educational institutions in the age group 15-18 (up to class XII) is 47.91 % and those in the age group 19-25 is 86.46% in the same year i.e. 2004-2005, it is clear that many discontinued higher education studies.

Also as per the report of the All India Survey on Higher Education (AISHE) Gross Enrolment Ratio (GER) in higher education i.e. age group 18-23 years for 2015-16 is 24.5% compared to 10.0% in 2004-05. Assuming the rate of growth of GER in Meghalaya to be the same (approx.about 140%) the increase in GER in higher education is assumed to rise from 27 % in 2004-05 to 65% in 2015-16. This means in the age group 18-25 years there areat least 35% not attending educational institutions in the year 2015-16, even with this supposed increase.

Reasons for higher dropouts are many. The most probable reason is the need to earn a living. Many leave studies in search for jobs. The other reason is the difficulty in getting enrolled to higher studies. In Meghalaya there is one central university, the

NorthEastern Hill University. As of now many learners are not getting admission into the university. In both the cases Open and Distance Learning (ODL) offers an alternative of choice for study, to prospective learners. IGNOU Regional Centre, Shillong has recorded a continuous growth in enrolment starting from its inception in 1986. Also, with ICT enabled learning, mobile phones with apps, smart phones etc, learners will have accessibility to learning even in the rural areas. Moreover IGNOU Shillong has created Facebook groups for its students to attend specifically to their queries. This corresponds to the increase of pass out from colleges who could not get admission in NEHU. In the recent past many private universities like Martin Luther Christian University (established in 2005), Mahatma Gandhi University (established in 2010) etc. have arisen to cater to the growing demands for higher education. It is here that distance education coupled with the use of ICT enabled learning tools can be a way out as seen in the use of GyanVani, E-gyankosh of IGNOU. The former is radio enhanced learning and the latter is a digital repository of study content.

Distance Education

As per the UGC(University Grants Commission Of India) norms every university must be dual mode,that is in addition to their traditional classes there should be also a Centre For Distance Education or a Distance Education Directorate. NEHU has a department of distance education. However, the number of courses on offer is limited. For now there are three programmes viz. BEd special education, Post Graduate Diploma in Special Education, Foundation course on children with disabilities.

In IGNOU Shillong,'thepeople's university' has been providing learning opportunities to many through ODL mode. As on January 2017 there are 36 study centres spreading across districts of the state. For the year 2016 there are 3704 students in rural centres and 5374 in urban centres. The number of learners district wise is shown in table below.

Rank	District	No of IGNOU study centres	No of Learners enrolled in the year 2016
0	Meghalaya	36	9078
1	East Khasi Hills	16	5878
2	West Khasi Hills	2	468
3	RiBhoi	3	123
4	East Garo Hills	1	118
5	South Garo Hills	1	189
6	West Garo Hills	6	987

7	West Jaintia Hills	3	586
8	South West Garo Hills	0	0
9	North Garo Hills	2	389
10	South West Khasi Hills	1	81
11	East Jaintia Hills	1	176

Table:5- IGNOU: Demographic Profile of the students for year 2016

No of SC students for the year 2016	No of ST students for the year 2016
121	8069

Table: 6 Distribution of SC/ST students enrolled in IGNOU for year 2016

Gender	No of students
Men	4025
Women	5053
Total	9078

Table: 7 Gender distribution of students enrolled in IGNOU for year 2016

The enrolment data shows the number of females enrolled in IGNOU is more than the number of males. This is a positive sign. In fact the census 2011 literacy growth shows that the growth of literacy for men and women is proportional. Also maximum number of students enrolled is tribal.

IGNOU at present has no study centre in South West Garo Hills. The population of the district is 1, 72,495 as per census 2011 and it shares 35 Km international boundaries with Bangladesh. Students wanting to pursue higher studies through distance pedagogy have to travel to nearest study centres in West Garo hills. Technology enabled centres which can be established, will be catalysts of learning for these segments of the society.

The number of students enrolled in East Khasi Hills is 64% of the total enrolled. Apart from the reason that the district has the highest number of population it also points to the increased migration to the state capital for higher education. It is also because of the availability of job opportunities in the state capital.

The role of IGNOU in delivering education through an alternative model is immense. A feed back collected by IGNOU RC Shillong from students who have just completed their programmes/courses and who received their certificates in the 30th convocation indicates the following:

(i) IGNOU provides students with the opportunity to complete higher education as conventional learning is closed for various reasons. For some who are already in jobs, it provides another opportunity to acquire higher or specialized degree or for the sake of knowledge per se.

(ii) There are areas/fields of studies which are still not activated at IGNOU Regional Centre Shillong. Many opine that technical or science education or skilled education is seriously required.

(iii) IGNOU can become more interactive by harnessing the tools of technology that the modern world can offer.

(iv) IGNOU has generated a huge number of trained teachers .i.e. B.Ed.degree holders who are currently employed as teachers in schools, across the state.

Use of ICT in Education

ICT has brought massive reforms in administration. Educational administration is no exception. Delivery of services is seeing a new form. It has increased accessibility, transparency and affordability.

In India, the government started SAKSHAT – a one stop education portal under the National Mission in Education through ICT. The Project aimed to provide lifelong learning to students free of cost. Recently another initiative the SWAYAM was started, fulfilling the Massive Open Online Courses (MOOCs). Through SWAYAM students can transfer completed credits to their academic records.

Telecom Density in Meghalaya

Telecommunications /Density

States	Total villages as per 2001 census	Villages uncovered	Percentage of village uncovered
Andhra Pradesh	28123	3786	13.5
Jharkhand	32615	5308	16.3
Bihar	45098	271	0.6
Gujarat	18539	1938	10.5
Haryana	6955	32	0.5
Himachal Pradesh	20118	1997	9.9
J&K	6652	636	9.6
Karnataka	29406	1197	4.1
Maharashtra	43711	5351	12.2

Madhya Pradesh	55393	1771	3.2
Chhattisgarh	20308	5460	26.9
Orissa	51349	6734	13.1
Punjab	12673	100	0.8
Rajasthan	41353	3153	7.6
Tamil	16317	191	1.2
UP	107452	5013	4.7
Uttarakhand	16826	1429	8.5
West	40782	899	2.2
Arunachal	5590	3126	55.9
Assam*	26550	3536	13.3
Manipur*	2612	634	24.3
Meghalaya*	6851	2612	38.1
Mizoram*	830	268	32.3
Nagaland*	1435	143	10
Sikkim*	452	27	6
Tripura*	901	2	0.2

* Note - Population and coverage data for North East Region states is as per 2011 census and as collected by Telecom Regulatory Authority of India from various TSPs operating in these states respectively; For others, the data is as per 2001 census and the USOF website respectively

Table 8: Telecommunication density across states in India

In Meghalaya as seen in the table above, 38.1 % of villages are still not covered by telecom services. The telecom density is still below national average. These are areas that require physical presence of study centres/institutes/colleges. In our visit to one of the villages, Laitkynsew about 55 Km from Shillong, there is only one school which was recently provincialized. The network availability is almost negligible. Despite the fact that the village hosts the well known tourist spot, the only living root bridge, the village is still lacking infacilities in many respects. Learners have to travel to nearby Sohra which is 15 km away for internet facilities.

E –readiness is a measure of the degree to which a country is prepared to partake in electronic activities and thus benefit from ICT in education(Dada, 2006). The state has been categorized as Below Average Achievers by"India: E-Government assessment report 2004", a study done by Department of Information Technology, Government of India.

As per TRAI the tele-density in North East India as on September 2016 is 84.26 %. This is growing and is expected to cross 100% by 2025. Private Service providers are playing a major role in connecting people. For instance Reliance JioInfocomm Limited (RJIL) in 2015 announced its plan to lay optical fibres and provide internet connection to 30 community and rural development blocks in the first phase (www.theshillongtimes.com).Hence Meghalaya's tele density which is lower than the other North East Indian states requires attention for furthering the cause of education.

The opportunity to deploy ICT in spreading the reach of education in the hilly, landlocked state of Meghalaya is constrained by various factors. Some are listed below:

(a) The main hindrance is digital capacity of the learners. It is not uncommon to find Master Degree learners who are clueless about the digital world or the internet.

(b) There is constraint in movement due to poor connectivity which results in seclusion.

(c) Lack of infrastructure. The hilly terrain and poor development proves costly in prospective investment and resource mobilisation.

(d) Parts of the state especially in Garo Hills are deeply affected by spurts of violence and militancy.

Despite obvious difficulties, it is becoming inescapable not to be inundated by the fast growing tentacles of the digital world. The space is shrinking with each passing day. The India government under its project BharatNet is pushing towards greater connectivity to all villages irrespective of geospatial terrain. In 2015, the Centre for development of Telematics (C-DOT) has developed two Wi-Fi products long distance and solar powered Wi-Fi, to address connectivity issues in rural areas, hilly terrain, highways and dense vegetation and tunnels (economictimes.indiatimes.com). Similarly, we can think of initiatives like Project Loon started by Google X to provide unhindered internet access to rural areas and poorly served regions.

Discussion

The peculiar location of the state provides both opportunities and challenges. The closeness to both state and international border produces vibrant movement. The border haatopens up trade along the border with Bangladesh. There is ample scope for small industries, cottage, handicrafts and agricultural processing to thrive due to availability of markets. Education system should cater to the skill needs of people living along the border. Modern technology is integral to skills education in modernist contexts.Economic survey has pointed out that for less developed states to converge with contemporary developmentthey should be able to generate skills.

Initiatives like the Skill Assessment Matrix for Vocational Advancement of Youth (SAMVAY) which allows vertical and lateral mobility within vocational education system and the current education system is to be encouraged and streamlined. Traditional knowledge and craftsmanship which are locally specific are to be taken into account. As for instance, in Mylliem village, East Khasi Hills, Meghalaya there are cohorts of blacksmith known for making durable and quality locks, knives and implements.

IGNOU has had a brief experience in vocational and skills based training through the Institute of Vocational and Training (IIVET). This can serve the twin requirement of employment generation and addressing the social problem of dropouts.

The setting of towers is also a hurdle. The National optical fibre network (NOFN) should be supplemented with last mile connectivity through towers. The success of any online initiative requires delivery of application, services on mobile phones. In areas where coverage is still a challenge, the Kiosk should be installed providing browsing, educational applications, basic informational and transactional services near the tower for access by all. The *Community Learning Centres* equipped with the above required facilities can be considered as model distance education or digital learning centres.The state government under the National e-governance plan has opened Rainbow Services Centres throughout the state to help delivery of variousservices to the citizen, through online methods..Universities like IGNOU can think of mass and radical technology-equipped machinery for education.

Education is tacitly recognised as basic human right. According to **Katarina Tomasevski, Croatia, UN Special Rapporteur**, *Education is the key for unlocking other human rights*. As any other right this right will remain a theoretical right unless people demand for it. This depends on the capacity and feasibility to exercise it. Policy making is a good start but as is seen in the performance of the Right to Education Act 2009 it has failed to ensure quality learning. Drop out rates indicate fragility to sustain retention in schools. E-learning can provide a way out by being independent of space and time. The flexibility to learn from any place at any time with no limitation of age or percentage can foster demand thereby fulfilling the idea of right based education. *This* empowerment is rightly hinted in the following words

The implications for education & training are immense if learning can be independent of time and place and available at all stages of a person's life. The learning context will be technologically wealthy and radicalized. Learners will have access not only to a wide range of media, but also to awide range of sources of education (Bates, 1993 p2)

Every individual desires to grow, achieve and sustain his/herstudies if opportunity prevails. Indira Gandhi, former Prime Minister once said that Education is aliberating and democratising force. It seems that we have forgotten to democratise the education system. The basic tenet of democracy is governance; by **government** of the **people**, by the **people, for the people.** The education system wants the "by the people" component. The system of education today is supply-based, the programmes and courses are decided form the top by the university, by decision makers or the state. This system is flawed in the sense that it leaves the needs and interests of the learners at the ground level. It also deprives the capacity to develop in the areas or subjects of interest as the learners have to choose from the pre-available courses. A shift to demand based courses focuses on the delivery of education to the needs of the students. Programmes can be region-based or profile-based depending upon the demands of the learners on the ground. A system to track the pulse of the learners can go a long way in designing and supplying need-based education. Now with the advance in the field of ICT, the advent of digital intelligence or the big data analytics it is no longer difficult to acquire the means for this synergy. This may also help in reducing drop-outs and increasing skill-based capacity thereby diversifying the agents of economic growth.

The effectiveness of deploying ICT in fostering accessibility, equity, affordability and inclusiveness depends on the ability and capacity of the learners. There should be demands from the learners. As majority of the learners especially from the rural areas are not digital literate, it is imperative for education providers, university and institutions to facilitate learning of computer and its application. Universities can include a compulsory module on ICT and its applications. The module must correspond to rapidly changing trends in the areas. This can ensure that learners are able to adapt to and explore the arena of the digital world.

Distance education as it is now is restricted to supplying of study materials and limited counselling. Learners who are disadvantaged find it difficult to capture learning. This retards the process of delivering quality education and life long learning. Classroom lectures can be simulated, replicated, recorded and distributed to learners through the virtual mode. In areas where there is no coverage, learner study centres/ community centrestoo can serve as hub where learners can download video lectures in mobiles and other digital media for use and effective learning.

Conclusion

The paper attempts a resource mapping of education in the state of Meghalaya with reference to literacy, rate of dropouts at school/colleges levels, status of colleges/ private/aided/adhoc-in –grant/ deficit etc, men/women ratio of IGNOU learners, tele-density in the state etc. These will help in critically examining the gaps in higher

education and how the IGNOU advocacy of flexibility in studies, short term vocational training and use of ICT (integrated technology) can take education to the furthermost corners of the state, to dropouts, working men and women and school and college teachers. Internet learning on the computer, mobile phones, e-books and free and open source software will be exacerbating factors in such learning, where geographical settings may be isolated but technology will break barriers imposed by distance and poor road connectivity. But technological connectivity can be available and todays user ofsuch technology both young and adult are readily adapting to such changes.

ICT would imply integration of radio, television, internet and the mobile phone. Also with the ushering of web-based and digital libraries in the new technological era we have been prevailing upon our study centres to impress upon Academic counsellors for use of intelligent web based learning among the different levels of our learners.

Web based learning/e-learning, use of social networking sites for group learning and video streaming are the *new typologies of learning today in a world which is both 'real' and 'virtual'.* Distance learning is moving away from the text to the hypertext granting the students more autonomy and creativity in learning.

IGNOU with its 36 studyin centresin Meghalaya consciously attempts to create this learner centric vision of learner autonomy via intelligent use of technology. Distance Education has moved away from the printed text to the visual with multiple classroom effects, community learning, mobile learning,digital repositories and e-libraries.

Distance and Open Learning in India is a social responsibility if one has to think of education in larger, holistic terms of, the following:

1. Education for the masses
2. Equity and accessibility in education for all segments of the society
3. Flexible educations in terms of relaxed entry points
4. More mobility in terms of completion, upward duration, credit transfer etc.
5. Thinking of specific target groups such as working people, differently - able, women, people in interior areas, ' drop outs', in work, training, etc.

Moreover distance education programmes offer vocational and professional training. Use of technology in training, teaching and learning can take academic programmes, to the above mentioned target groups, spacing out constraints of place, pace and use of technological resources integration, in a creative and effective manner.

References

1. Dada, D. (2006). E-readiness for developing countries: Moving the focus from environment to user. *The Electronic Journal on Information System in Developing Countries,* EJISDC (2006) 27, 6, 1-14

2. Telecom Regulatory of India (TRAI). (2016 December 9). Press Release No. 117/2016. Retrieved from http://www.trai.gov.in/sites/default/files/PR_No_117_Eng_09_Dec_2016_0.pdf

3. Government of Meghalaya. (2008). *The Meghalaya human development report, 2008*. Retrieved from http://megplanning.gov.in/report.htm

4. Telecom Regulatory Authority of India (TRAI). (2013). *Recommendations on improving Telecom Services in North East India, 2013*. Retrieved from http://www.trai.gov.in/sites/default/files/13Sep_Recommendation_26Sep13.pdf

5. *Meghalaya Education Department*. (n.d.). Retrieved from www.ditmeghalaya.gov.in

6. Ministry of HRD, Government of India, Public Information Bureau (2017 February 9). *Drop out of students from higher education*. Retrieved from http://pib.nic.in/newsite/PrintRelease.aspx?relid=158328

7. Bates, A.W. (1993). *Educational aspects of the telecommunications revolution in tele-teaching*. Laxenburg: IFIP.

Abbreviations

1. AISHE: All India Survey on Higher Education
2. BED: Bachelor of Education
3. BPP: Bachelor Preparatory Program
4. C-DOT: Centre for Development of Telematics
5. DTH: Direct to Home
6. GER: Gross Enrolment Ratio
7. ICT: Information and Communication Technology
8. IGNOU: Indira Gandhi National Open University
9. IIVET: Institute of Vocational Education and Training
10. MOOC: Massive Open Online Course
11. NEHU: North Eastern Hill University
12. NIFT: National Institute of Fashion Technology
13. NIT: National Institute of Technology
14. NOFN: National Optical Fibre Network

15. SC: Scheduled Caste
16. ST: Scheduled Tribe
17. ODL: Open and Distance Learning
18. SAMVAY: Skill Assessment Matrix for Vocational Advancement of Youth
19. SWAYAM: Study Webs of Active –Learning for Young Aspiring Minds
20. TRAI: Telecom Regulatory and Authority of India
21. TSPs: Telecom Service Providers
22. USOF: Universal Service Obligation Fund
23. UGC: University Grant Commission

The Impact of Demographic Variable on the Level of Job Satisfaction Among College Teachers in Mizoram

Lalthanpuii Ralte*

Abstract

College teachers are possibly the most important professionals for our nation's future. Therefore, it is disturbing to find that many of today's teachers in higher education are dissatisfied with their jobs. Job satisfaction is good not only for the employees but for society as a whole. It increases productivity and classroom performance in the college. But without job satisfaction among the college teachers, the objective of providing quality education would not be materialised. Therefore, job satisfaction is needed among college teachers to promote quality education. This study, therefore, explores some demographic variables which directly or indirectly affect the performance of teachers in the workplace and towards the society.

Keywords: *Job satisfaction, College teacher, Demographic variable, Quality education.*

Introduction

The growth of any nation in different aspects of life greatly depend upon the quality of its people, which in turn builds upon how well the younger generation is shaped by parents, teachers, and education system as a whole. Students are one of the important assets of any society. The Education Commission (1964-1966) has remarked that, "The destiny of India is now being shaped in her classroom". It is truth that, "No people can rise above the level of its teachers", as mentioned in the National Policy on Education, 1986. However, educational institutions are just 'shells' if there is no strive for imparting and nurturing development of the students. The factors which influence excellence in the field of education are the quality, competence and character of teachers apart from the infrastructure, cognitive and non-cognitive qualities of students and parental support (Khan, 2012).Numbers of researchers (Khan 1995, Perie & Baker 1997, Rasheed 2010) have concluded that job satisfaction may have a direct impact on the students learning ability as well as teaching efficiency. Job satisfaction is defined

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as involving cognitive, affective, and evaluating reactions or attitudes and states. It is a pleasurable or positive emotional state, resulting from the appraisal of one's job or job experiences. Job satisfaction is a result of employees' perception of how well their job provides those things that are viewed as important. It is generally recognised in the organisational behaviour field that the job satisfaction is the most important and frequently studied attitude (Locke 1976). A person with a high level of job satisfaction holds positive feelings about his or her job, while a dissatisfied person holds negative feelings. This study, therefore, explores job satisfaction of teachers which directly or indirectly affect their performance in the workplace and towards the society.

Different demographic factors like age, gender, marital status, educational qualification, experience, designation, promotional opportunities and income level are the most important key to measure the level of job satisfaction. Workers' unsatisfactory level of job results in different workers having the same qualification or experience but getting different amount of income. In several countries there exist a high satisfaction level among female teachers while in others; the difference of that satisfaction level cannot be identified. In teaching children, young trained teachers having much experience are often satisfied in their job.

Review of some researchers revealed that the teachers in general were not satisfied with their job. Male and female teachers were not significantly different in the level of their overall job satisfaction and there was no positive significant difference between the teachers working in rural and urban areas in the level of job satisfaction. Further, it was also found that married and unmarried teachers were significantly different in their level of job satisfaction with only three factors, viz., policy matters, suitability and students (Padmanabhaiah, 1986). Other researchers found out that both male and female teachers working in autonomous and controlled school climate were found more responsible and highly satisfied. And as compared to rural teachers, urban teachers were found more satisfied with their job (Shanker, 1987). Non-schedule caste, urban and Hindi-speaking teachers were found to be more satisfied. The male teachers had greater job satisfaction than the female teachers; trained postgraduate teachers, single-family and more experienced government school teachers were found to be more satisfied with their jobs; economic and political values were significantly related to job satisfaction; and caste, place of work and mother tongue influenced job satisfaction whereas age and marital status did not (Agarwal, 1991). In respect of their gender, among the secondary school teachers in Mizoram, there is a significant difference in the job satisfaction between male and female teachers. The male teachers are found to be more satisfied than their counterparts. It was also found that there was no significant different found between the urban and rural secondary schools in Mizoram (Lalzarmawii, 2010).Further, findings of studies in the other parts of the country have

investigated the effects of gender on the job satisfaction of UK academics. Overall, female academics at higher ranks were more satisfied with their jobs than male academics of comparable ranks (Oshagbemi,1999).

The answer to these questions could be found only through research. Most of the research in job satisfaction is related to management of industrial, banking and business organisation. The study of college teachers' job satisfaction is not many, and may be non-existent in the state of Mizoram. Hence, research attempt is needed in college teachers' job satisfaction, if there is an interest to provide quality education to students at the college level. This study hopes to contribute to that extent.

Objectives of the study

1. To discern the level of job satisfaction of the college teachers with respect to demographic profile.
2. To know whether female college teachers are more satisfied than male college teacher.

Methodology

The study is designed to examine the degree of job satisfaction among teachers working in Government Aizawl College (1975 estd.) and Government Hrangbana College (1980 estd.). Government Aizawl College being the oldest functioning college in Aizawl under Government of Mizoram and Government Hrangbana College represent the largest student population among the colleges in the State. The study covers all the regular teachers of the college as respondents, who were 108 teachers on rolls as on 31st March, 2014.

The study is based on primary as well as secondary data. Primary data is collected from the teacher respondents through structured questionnaire, covering all the teachers in the different departments of the two colleges. Questionnaire is derived from Minnesota Satisfaction Questionnaire 1967 revision developed by Vocational Psychology Research, University of Minnesota. The questionnaire is divided into 4 categories viz. Income and Promotion, Workload, Interpersonal Relationship and Working Conditions. Each category contains 10 questions in which the teachers were asked to answer 40 separate questions by using 5 point scale. These categories are summated into 4 indexes, namely, income and promotion or IP Index, workload or WL Index, interpersonal relationship or IR Index and working conditions or WC Index. Reliability check was made as a part of preliminary exercise and the cronbach α scored was arrived at .944, which is well above the acceptable level (i.e. 0.6). Thus, our instrument and responses may be considered reliable. The survey was conducted during July – September, 2014.

In addition to primary data, Secondary data is collected from published and unpublished sources.

Analysis of Data

The level of job satisfaction of teachers working in Govt. Aizawl College and Govt. Hrangbana College is examined. The study covers all the regular teachers of both the Colleges as respondents, who were 108 teachers on rolls as on 31st March, 2014.

The department-wise strength of teachers in the select government colleges are given in the Table 1:

Table 1: Department-wise number of Teachers as on 31st March, 2014

Sl.No	Department	No. of Teachers	
		Govt. Aizawl College	Govt. Hrangbana College
1	English	8	5
2	Mizo	8	7
3	Hindi	1	-
4	Political Science	7	5
5	History	9	5
6	Economics	5	5
7	Education	8	6
8	Geography	-	6
9	Public Administration	-	6
10	Psychology	-	3
11	Sociology	3	-
12	Commerce	4	7
Total		53	55

Testing differences between designation groups with regard to 4 indexes

Kruskal Wallis H Test was administered to test whether there are any significant differences between the designation groups with regard the said indexes. From the analysis, it may be inferred that-

1. Designations of the respondents has no significant effect on respondents' level of satisfaction with regard to income and promotion, $\chi 2= 4.922, p = .178$

2. Designations of the respondents has no significant effect on respondents' level of satisfaction with regard to Workload, $\chi 2= 4.796$, $p = .187$

3. Designations of the respondents has a significant effect on respondents' level of satisfaction with regard to interpersonal relationship in workplace, $\chi 2= 9.171$, $p = .027$. However, this significant difference lies between the level of Assistant Professor Grade 1 and Associate Professor ($p=.045$)

4. Designations of the respondents has no significant effect on respondents' level of satisfaction with regard to working conditions, $\chi 2= 3.937$, $p = .268$

Testing differences between genders of the respondents with regard to 4 indexes

The IP, WL, IR and WC indexes are analyzed according to gender of the respondents. From the analysis, it may be inferred that

1. There is no significant difference between male and female respondents with regard to income and promotion, $Z=-.354$, $p=.723$. Cohen's effect size calculation estimates $r=-.039$, indicating a very weak difference between the two groups.

2. There is no significant difference between male and female respondents with regard to workload, $Z=-1.195$, $p=.232$. Cohen's effect size calculation estimates $r=-.133$, indicating a very weak difference between the two groups.

3. There is no significant difference between male and female respondents with regard to interpersonal relationship, $Z=-.218$, $p=.828$. Cohen's effect size calculation estimates $r=-.024$, indicating a very weak difference between the two groups.

4. There is no significant difference between male and female respondents with regard to working conditions, $Z=-.266$, $p=.790$. Cohen's effect size calculation estimates $r=-.030$, indicating a very weak difference between the two groups.

5. It is interesting to note that the sum of ranks for female respondents is always > than their male counterpart i.e. Z value is always negative. This shows that the levels of satisfaction in these 4 indexes are lower for male respondents.

Testing significance differences between educational degrees of the respondents with regard to 4 indexes.

Kruskal Wallis H Test was administered to test whether there are any significant differences between educational degrees with regard to IP, WL, IR and WC indexes. The analysis shows that-

1. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to income and promotion, $\chi 2= .732$, $p = .694$

2. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to Workload, $\chi 2= .321$, $p = .852$

3. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to interpersonal relationship in workplace, $\chi 2$= .208, p = .901.

4. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to working conditions, $\chi 2$= .289, p = .866

Testing differences between married or unmarried teachers with regard to 4 indexes

The IP, WL, IR and WC indexes are analyzed according to marital status of the respondents. From the analysis, it may be inferred that

1. There is no significant difference between married or unmarried teachers with regard to income and promotion, Z=-1.904, p=.057. Cohen's effect size calculation estimates r=-.216, indicating a weak difference between the two groups.

2. There is no significant difference between married or unmarried teachers with regard to workload, Z= -1.948, p=.051. Cohen's effect size calculation estimates r=-.216, indicating a weak difference between the two groups.

3. There is no significant difference between married or unmarried teachers with regard to interpersonal relationship, Z=-1.112, p=.266. Cohen's effect size calculation estimates r=-.124, indicating a very weak difference between the two groups.

4. There is no significant difference between married or unmarried teachers with regard to working conditions, Z=-1.728, p=.084. Cohen's effect size calculation estimates r=-.192, indicating a very weak difference between the two groups.

Relationship between years of service with regard to 4 indexes

Correlation analysis was administered using Spearman's ρ between years of service rendered by the respondents and levels of satisfaction in the 4 indexes. Table no 2 demonstrates the analysis-

Table 2: Relationship between years of service with regard to 4 indexes

Years of services	On Income and Promotion	On Workload	On Interpersonal Relationship	On Working Conditions
Coefficient ρ	.417**	.313**	.328**	.162
Sig. (2-tailed)	.000	.004	.003	.148
Effect size	17.38%	9.80%	10.75%	2.62%

It may be inferred that years of services rendered is significantly related to the three indexes except in the case of working conditions (where p>.05). However, the effect size (% of variation in the indexes) of year of services is quite low in all of the cases.

Hypotheses

The following research hypotheses were tested and findings may be seen as follows:

H1. There is a significant relationship between the designation of the college teachers and their level of job satisfaction.

Finding: ρ correlation analysis indicated that there is a significant positive relationship between designation of the college teachers and their overall job satisfaction index. In other words, job satisfaction level significantly increases with level of designation among the college teachers. Thus, H1 There is a significant relationship between the designation of the college teachers and their level of job satisfaction may be accepted. However, it may be noted that only 8.35% variation of job satisfaction index is explained by designations (coefficient=.289, effect size=8.35%, p= 0.009).

H2. Female college teachers are more satisfied with their job than their male counterpart.

Finding: The mean ranks of male and female with regard to job satisfaction suggests that female teachers are slightly more satisfied than their male counterpart. Their difference is thus shown to be insignificant as Mann-Whitney U-Test arrived at the asymptotic significance level > 0.05. It may be inferred that even though female teachers are marginally more satisfied with their job, this difference is not significant. Thus, H2 Female college teachers are more satisfied with their job than their male counterpart may be rejected.

Findings

Findings with regard to designations of the respondents in relation to the 4 indexes (Income and Promotion, Workload, Interpersonal Relationship, Working Conditions)- Kruskal Wallis H Test was administered to test whether there are any significant differences between the designation groups with regard tothe said indexes. From the analysis, it may be inferred that

1. A designation of the respondents has no significant effect on respondents' level of satisfaction with regard to income and promotion.
2. A designation of the respondents has no significant effect on respondents' level of satisfaction with regard to Workload.

3. A designation of the respondents has a significant effect on respondents' level of satisfaction with regard to interpersonal relationship in workplace.

4. A designation of the respondents has no significant effect on respondents' level of satisfaction with regard to working conditions.

Findings with regard to genders of the respondents in relation to the 4 indexes (Income and Promotion, Workload, Interpersonal Relationship, Working Conditions)-

The IP, WL, IR and WC indexes are analyzed according to gender of the respondents. From the analysis, it may be inferred that

1. There is no significant difference between male and female respondents with regard to income and promotion, indicating a very weak difference between the two groups.

2. There is no significant difference between male and female respondents with regard to workload, indicating a very weak difference between the two groups.

3. There is no significant difference between male and female respondents with regard to interpersonal relationship, indicating a very weak difference between the two groups.

4. There is no significant difference between male and female respondents with regard to working conditions, indicating a very weak difference between the two groups.

Findings with regard to educational qualification of the respondents in relation to the 4 indexes (Income and Promotion, Workload, Interpersonal Relationship, Working Conditions)-

Kruskal Wallis H Test was administered to test whether there are any significant differences between educational degrees with regard to IP, WL, IR and WC indexes. The analysis shows that

1. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to income and promotion.

2. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to Workload.

3. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to interpersonal relationship in workplace.

4. Educational degree held by the respondents has no significant effect on respondents' level of satisfaction with regard to working conditions.

Findings with regard to marital status of the respondents in relation to the 4 indexes (Income and Promotion, Workload, Interpersonal Relationship, Working Conditions)-

The IP, WL, IR and WC indexes are analyzed according to marital status of the respondents. From the analysis, it may be inferred that

1. There is no significant difference between married or unmarried teachers with regard to income and promotion, indicating a weak difference between the two groups.
2. There is no significant difference between married or unmarried teachers with regard to workload, indicating a weak difference between the two groups.
3. There is no significant difference between married or unmarried teachers with regard to interpersonal relationship, indicating a very weak difference between the two groups.
4. There is no significant difference between married or unmarried teachers with regard to working conditions, indicating a very weak difference between the two groups.

Findings with regard to relationship between years of service and the 4 indexes (Income and Promotion, Workload, Interpersonal Relationship, Working Conditions)-

Correlation analysis was administered between years of service rendered by the respondents and levels of satisfaction in the 4 indexes. It may be inferred that years of services rendered is significantly related to the three indexes except in the case of working conditions However, the effect size of year of services is quite low in all of the cases.

Suggestions for Further Improvement

Based on the findings, the following suggestions are made to the teachers working in Government Colleges of Mizoram to improve their job satisfaction level.

1. The study shows that the effect size of years of service is found to be relatively low in all of the cases. Therefore, institutions may try to enhance the physical working conditions and amenities. Interaction with the respondents reveals that the teachers would want to have a respectable and comfortable workplace, common rooms and restrooms.
2. Majority of the teacher-respondents are found to be satisfied in all the areas while, a small percentage of the respondents are not satisfied in certain areas. So, it may

be necessary for the colleges to take essential policies in making the teachers more aware of the importance of their profession i.e. teaching.

Reference:

Agarwal, M. (1991). *Job satisfaction of teachers in relation to some demographic variables and values.* Unpublished Doctoral Thesis. Agra University.

Govt. Aizawl College Annual Magazine 2013-2014. (2014). Aizawl: Govt. Aizawl College.

Govt. Aizawl College Prospectus-2014. (2014). Aizawl: Govt. Aizawl College.

Govt. Hrangbana College Annual Magazine 2013-2014. (2014). Aizawl: Govt. Hrangbana College.

Govt. Hrangbana College Prospectus-2014. (2014). Aizawl: Govt. Hrangbana College

Higher & Technical Education Department Handbook (2010). Aizawl: Government of Mizoram.

Khan, A. (1995). Job satisfaction: Definitions and theories. *Journal of Indian Education*, XXI(1), 22-28.

Khan, I. (2012). Job satisfaction among college teachers. *VSRD International Journal of Business and Management Research*, 2(12), 585-587.

Lalzarmawii (2010). *A study of job satisfaction among secondary school teachers in Mizoram in relation with their values system and locus of control*. Doctoral Thesis submitted to Mizoram University, Aizawl.

Locke, E.A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organizational psychology.* 1(1), 1297-1343.

Mizoram Statistical Handbook (2000). Aizawl: Department of Births and Deaths, Government of Mizoram.

Notification and 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). Aizawl: Higher and Technical Education Department, Government of Mizoram.

Oshagbemi, T. (1999). Overall job satisfaction: How good are single versus multiple-item measure?", *Journal of Managerial Psychology,* 14(5), 111-123.

Padmanabhaiah, S. (1986). *Job satisfaction and teaching effectiveness of secondary school teacher.* Doctoral Thesis submitted to S.V. University, Tirupati, Andra Pradesh.

Perie, M. & Baker, D.P. (1997). Job satisfactionamong America's teachers: Effects of workplace conditions, background characteristics and teachers compensation. *National Centre for Education Statistics, XXX, 1-133.*

Rasheed, M.I. (2010). Motivational issues for teachers in higher education: A critical issue of IUB. *Journal of management research.* 2(2), 1-23.

Ramakrishnaiah, D. & Rao, D.B. (1998). *Job satisfaction of college teachers* (1st ed.). New Delhi : Discovery Publishing House.

Shanker, V. (1987). *A study of teacher respomsibility and its relationship with school climate and job-satisfaction of teachers at the secondary school level in Moradabad District.* Doctoral Thesis submitted to Rohilkhand University, Bareilly,U.P.

Background of Students Pursuing Vocational Courses at Higher Secondary Stage of Education in Mizoram: An Analysis

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Abstract

The present study focuses on the background information of students pursuing vocational courses at higher secondary stage of education in Mizoram. The study covered 618 students enrolled in 8 different vocational courses introduced in 14 higher secondary schools in Mizoram. Information sheet cum questionnaire constructed by the investigators for the purpose of the present study was used to collect the required data. The study revealed that most of the students of vocational courses were with poor academic background and had repeated any one or more of the classes at elementary, secondary and higher secondary stages of education. They also have family background with low or moderate socio-economic status.

Keywords: *Background, Students, Vocational courses.*

Introduction

Vocational education refers to education designed to prepare skilled personnel at lower levels of qualification for one or a group of occupations, trades or jobs. Vocational education at higher secondary level includes general education, practical training for the development of skills required by chosen occupation and related theory. The proportions of these components may vary considerably but the emphasis is on practical training.

The Education Commission 1964-66 under the Chairmanship of Prof. D. S. Kothari made substantial recommendations for a rational pattern of education in India and the introduction of vocational education. The Commission viewed that secondary education would be terminal (final) for those who, after successful completion of course want to earn a living and enter the world of work. It will also be a preparatory stage

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for those who want to continue their studies. University Education is not necessary for most of the occupation and some jobs can be performed by well trained higher secondary students. Therefore, the Commission suggested a uniform pattern of 10+2+3 which means 10 years of general education, plus 2 years of education with vocational bias at the higher secondary level and 3 years of degree course in colleges. The Commission envisaged that about 50 percent of the students at the plus two stages would be covered by Vocational Education Programme over a period of 20 years (Sharma & Sharma, 2006).

The National Policy on Education (1986) and its revised formulations gave stress on the introduction of a logical, organized and well thought out programmes of vocational education. Some of the main aims of secondary education related to vocational education according to National Policy on Education (1986) are:

i) To develop a hearty mind-set among students towards work and life.

ii) To improve the employability of individuals.

iii) To lessen the disparity between the requirement and provision of skilled man-power.

iv) To prepare students for identified vocations spanning several areas of activity.

v) To offer scope for professional augmentation, career advancement and tangential entry into courses of general, technical and professional education through fitting bridge courses (Swain, 1998).

It is obvious from the above recommendations that the main aim of vocational education is to prepare an individual for the world of work after leaving school. Several commissions have made different attempts to improve vocational education in India. The recommendations made were not much effective during the pre independence period. But in the post independence period, vocational education was given due importance as its role for the development of the nations was realised. The Centrally Sponsored Scheme of Vocationalisation of Secondary Education was implemented in 1988 which became an important milestone for vocational education.

The state of Mizoram so far has introduced 8 different vocational courses in 14 higher secondary schools. More than 700 students are enrolled in these courses. It will be interesting to know who the students of vocational subjects are. What academic backgrounds do they have? What family backgrounds do they come from? Knowledge of these and other backgrounds of these students will help one in understanding the reality of vocational education in the state and will also help in advocating better policy and practices for the success of vocational education. It is in this context that the present study has been devoted to a study of the background of students pursuing vocational courses at higher secondary stage of education in Mizoram.

Objective of the Study:

The objective of the present study is to analyze the background of students pursuing vocational courses in Higher Secondary Schools in Mizoram.

Methodology of the Study:

The present study adopted a descriptive survey approach. The total number of 777 students enrolled in different vocational courses offered by 14 Higher Secondary Schools in Mizoram during 2014-2015 constituted population of students for the present study. Sample selection was not done as the number of students enrolled in vocational courses at higher secondary level was not large. All the 14 higher secondary schools offering vocational courses in the State were visited and all the students of vocational subjects present on the day of data collection formed the sample. As such, the sample of the present study came to be 618 students.

Information Sheet cum Questionnaire for studying students' background was prepared to find out the students' family and educational background. There were fourteen open ended questions. The data obtained after tabulation were analyzed quantitatively. For quantitative analysis descriptive statistics such as frequency and percentage were used.

Analysis and Interpretation of Data Relating to Background of Students

1. Class Wise Distribution of the Students

Table 1: Class Wise Distribution of the Students

Class	No.	Percentage
XI	361	58.41
XII	257	41.59

A cursory glance at Table 1 shows that Class XI students constitute 58.41 percent while Class XII students are 41.59 per cent. This may indicate that vocational course is still popular and more and more students go for this. On the other hand, it may indicate that students drop out after class XI and that is why the number of students in class XII is less than that of class XI.

2. Hometown of the Students

Table 2: Hometown of the Students

Hometown	No.	Percentage
Aizawl City	282	45.63
District Headquarters.	36	5.83
Town	164	26.54
Village	136	22.00

The above table (Table 2) clearly shows that most of the students who pursue vocational courses are from Aizawl City *i.e.* 45.63 per cent from the total respondents and only a few students i.e. 5.83 per cent are from District Headquarters. There are 26.54 per cent students from Towns and 22 per cent students are from villages. This, however, does not mean that they are from good socio economic background.

3. Age of the Students

Table 3: Age-wise Distribution of Students

Age	No.	Percentage
Below 16	21	3.40
16	135	21.84
17	213	34.47
18	160	25.89
Above 18	89	14.40

Table 3 reveals that 17 years of age constitutes the highest percentage, that is, 34.47 per cent and 16 years of age constitutes 21.84 per cent of the students. These students are at the right age-group for class 12 and 11 respectively. The fact that 25.89 per cent of the students are 18 years old and 14.40 per cent are above 18 years indicates that these students are over-aged for higher secondary classes. They might be the ones with poor academic records in school and might have repeated any one of the previous classes.

4. Gender of the Students

Table 4: Gender-wise Distribution of Students

Gender	No.	Percentage
Male	360	58.25
Female	257	41.58

A look at Table 4 shows that there are more male students i.e. 58.41 per cent who choose vocational course than female students i.e. 41.58 per cent. This may imply that vocational course is more popular among males than females.

5. Occupation of Fathers

Table 5: Fathers' Occupation

Father's Occupation	No.	Percentage
Government Servant	198	32.04
Small Business	57	9.22
Private company	13	2.10
Self Employed	223	36.08
Others	127	20.55

It is noticeable from Table 5 that majority of the students' fathers i.e. 36.08 per cent is self-employed which includes cultivator, farmer, a manual worker, laborer, carpenter etc. The second highest (32.03 %) occupation is Government servant, and the lowest (2.10%) occupation is working in private company. There are 9.22 per cent students whose fathers are occupied in small business and 20.55 per cent who depend on other work. The table implies that most students of vocational courses are from poor economic background.

6. Educational Qualifications of Fathers

Table 6: Fathers' Educational Qualification

Educational Qualification	No.	Percentage
VIII	187	30.26
HSLC	191	30.91
HSSLC	115	18.61
Graduate	102	16.50
PG	17	2.75
M.Phil	2	0.32
Ph.D	4	0.65

Table 6 shows that majority (79.78%) of the fathers of vocational students are under graduate out of which 30.26 per cent are class VIII, 30.91 per cent HSLC and 18.61 per cent HSSLC. Only 20.22 per cent of the parents are graduate and above out of which majority (16.50%) are graduate, only 2.75 per cent, 0.32 per cent and 0.65 per cent are post-graduate, M.Phil and Ph.D. respectively. This may indicate that majority of the students of vocational subjects do not have fathers who can give them career guidance and help them in pursuing higher careers.

7. **Occupation of Mothers**

Table 7: Mother's Occupation

Mother's Occupation	No.	Percentage
Government Servant	79	12.78
Small Business	125	20.23
Private company	8	1.29
Self Employed	215	34.79
Others	191	30.91

Table 7 reveals that self employed mothers constitute the highest percentage i.e. 34.79 per cent who are mainly cultivators, farmers, weavers, manual laborers etc. Only 12.78 per cent of the mothers are Government servants and another 20.23 per cent are engaged in small business. A few per cent of mothers i.e. 1.29% works under private company. Occupation of mothers shown in the table may imply that most of the vocational students are not from well to do families.

8. **Educational Qualifications of Mothers**

Table 8: Mother's Educational Qualification

Educational Qualification	No.	Percentage
VIII	243	39.32
HSLC	211	34.14
HSSLC	107	17.31
Graduate	48	7.77
Post Graduate	7	1.13
M.Phil	0	0
Ph.D	2	0.32

The highest percentage of the mothers of vocational students (39.32%) studies till Class VIII as shown in Table 8. There is no M.Phil degree holder while there are 2 mothers (0.32%) who have PhD. The second highest percentage of mothers (34.14%) is with qualification of HSLC. There are 17.31 per cent who study till HSSLC and 7.77 per cent who are graduates. A few per cent mothers (1.13%) have master's degree. The percentages go on decreasing as the educational qualifications go on increasing which shows that the most of the mothers do not pursue higher studies.

9. Academic Record of Students in HSLC

Table 9: Academic Record of Students in HSLC

Academic Record in HSLC	No.	Percentage
MBSE	616	99.68
CBSE	2	0.32
Distinction	1	0.16
1st	51	8.25
2nd	237	38.35
3rd	329	53.24
Rank Holder	0	0

Board: It is clear from the Table 9 that almost all the students i.e. 99.68 per cent of the students of vocational course did their High School Leaving Certificate (HSLC) examination under Mizoram Board of School Education (MBSE). Only 0.32 per cent of the students completed their HSLC under C---entral Board of Secondary Education (CBSE).

Division: Majority of the students i.e. 53.24 per cent passed HSLC in 3rd Division. Only 0.16 per cent of students passed in Distinction, 8.25 per cent in 1st division and 38.35 per cent in 2nd division. It may, thus, safely be concluded that students pursuing vocational courses in higher secondary schools in Mizoram are mostly with poor academic record. It is probably due to their poor academic achievement in HSLC coupled with difficulty in getting admission in general courses that they have gone for vocational courses.

10. Repetition of Classes in Schools

Table 10: Repeaters in Different Stages of Schools

Different Stage of Schools	No.	Percentage
Primary School	67	10.84
Middle School	69	11.16
High School	126	20.39
Higher Secondary school	84	13.59
Total Repeaters	346	55.98

Table 10 shows that there are 20.39 per cent who repeated in high school, 13.59 per cent repeaters at higher secondary school, 11.16 repeaters in middle school and 10.84 per cent repeaters in primary school. Majority of the students of vocational courses (55.98%) failed and repeated any one or more of the classes at primary, middle/ upper primary, high school and higher secondary school stages.

11. Decision Maker to Pursue Vocational Course

Table 11: Decision Makers to Study Vocational Courses

Decision Maker	No.	Percentage
Teacher	13	2.10
Parent	107	17.31
Friend	8	1.29
Self	490	79.29

Table 11 indicates that majority of the students i.e. 79.29 per cent were decision makers to pursue vocational courses at the time of admission. Only 17.31 per cent of parents made the decision for their children to study vocational courses. Few students i.e. 2.10 per cent were advised by teachers and 1.29 per cent by friends to study vocational courses.

Findings and Conclusions Related to Background of Students:

1) Of the total number of students *i.e.*, 618 enrolled in vocational courses at higher secondary Stage, 58.41 per cent were students of Class XI and 41.59 per cent Class XII.

2) Students from Aizawl City constituted the highest percentage (*i.e.*, 45.63) of vocational students whereas 26.54 per cent were from towns, 22.01 per cent from villages and only 5.82 per cent from District Headquarters. However, this does not mean that students are from good socio economic background.

3) As many as 40.29 per cent of students were 18 years and above and were over-aged for higher secondary classes. This indicates that they were repeaters of previous class or classes.

4) There were 58.41 per cent male students and 41.58 per cent female students. Thus, vocational course as a whole is more popular among males than females.

5) Most students of vocational courses were from poor economic background as indicated by the fact that self employed fathers who worked as cultivators, farmers, manual workers, laborers, carpenters etc. constituted the highest percentage of their parents.

6) Majority of the students of vocational subjects did not have fathers who could give them career guidance and help in pursuing higher careers. This is implied by the finding that majority (79.78%) of the fathers were under graduate out of whom 30.26 per cent were class VIII, 30.91 per cent HSLC and 18.61 per cent HSSLC.

7) Self employed mothers constituted the highest percentage i.e. 34.79 per cent who were mainly cultivators, farmers, weavers, manual laborers etc. Occupation of the mothers revealed that most of the vocational students were not from well to do families.

8) The highest percentage of the mothers of vocational students (39.32%) studied till Class VIII only. The percentages of mothers went on decreasing as the educational qualifications went on increasing which implies that most of the mothers do not pursue higher studies.

9) Students pursuing vocational courses in higher secondary schools in Mizoram were mostly with poor academic record that is indicated by the fact that majority of the students i.e. 53.24 per cent passed HSLC in 3rd Division.

10) Majority of the students of vocational courses (55.98%) failed and repeated any one or more of the classes at primary, middle/upper primary, high school and higher secondary school stages.

11) Majority of the students (79.29 %) themselves made the decision to pursue vocational courses at the time of admission.

Conclusion

Vocational education is not that successful in Mizoram as it should be. It is, in a way, considered as inferior to general education. There seem to be some reasons for this. The courses and students themselves do not receive the attention that they deserve. Students face lots of difficulties with regard to facilities, on the job training or internship, placement and further studies. Many passed out students could not get placement or are not well equipped with skills necessary to make self employment. Students who want to pursue further studies are faced with the problem of getting admission as courses relevant to them are not available in colleges in the state. Due to these and other reasons, the state government needs to do something to solve the problems.

In view of the situation mentioned above, it is suggested that the government should introduce more vocational courses which would provide better scope of lucrative self employment as well as employment under successful employers. Courses which have better scope for further studies should also be thought out. Curricula of the existing courses need to be revised often to accommodate more up to date topics and practical. The courses also need to be popularized to attract more students.

Reference

Sharma, R.N. & Sharma, R.K. (2006). *Problems of education in India*. New Delhi: Atlantic Publishers & Distributors. pp. 213-220.

Swain, S.K. (1998). *Trends and issues in Indian education.* Delhi: Kalyani Publishers. *pp. 2.4-2.5.*

Profile of College Teachers in Mizoram

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Abstract

Quality of higher education to a great extent depends upon the quality of the teachers. Teaching in higher education is a profession which is intellectually demanding and a complex task which needs to prepare students and equip them with appropriate skills, knowledge, values and attributes to be fit for any kind of employment and to succeed. In the 21st century, higher education institutions are ever more competing for the becoming centre of excellence. Unless teachers at higher education are highly qualified, innovative, creative, and competitive by world standards, it will be difficult to create centre of excellence and supply the demands of the society. In such a situation, teachers in higher education need to have highest possible degree so that the students may feel that they get the highest possible teaching. The present study is undertaken to understand the real picture of college teachers in Mizoram in different categories i.e. gender, qualifications (research activity), teaching experience, academic streams, nature of appointment and age. From this study, it was found that faculty shortage and only small number of college teachers involved in research were the most important problems hampering quality improvement in higher education in Mizoram.

Keywords: *Higher Education, College Teachers*

Introduction

Higher education plays a vital role in the overall development and growth of a country. Hence, quality in higher education has become a primary agenda for countries all over the world. Quality of higher education to a great extent depends upon the quality of the teachers. Teaching in higher education is a profession which is intellectually demanding and a complex task which needs to prepare students and equip them with appropriate skills, knowledge, values and attributes to be fit for any kind of employment and to succeed.

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The role of the teacher has undergone continuous changes as the student population has considerably increased and become more diversified. Traditionally, teachers in higher education are expected to be good lecturers who use lecture method for teaching. But today, due to globalization, internationalization, knowledge based society and rapid growth of technology; transmitting knowledge through lecturing alone is not sufficient to ensure quality in higher education (Naik, 2015). Teachers need to facilitate the students/learners to acquire high quality knowledge content and acquire the ability to apply the knowledge to the real world. Moreover, higher education is increasingly seen as an investment that should contribute to prosperity of a nation in the long term. Therefore, the return on the investment must be assurance of good quality in higher education.

In the 21st century, higher education institutions are ever more competing for the becoming centre of excellence. Unless teachers at higher education are highly qualified, innovative, creative, and competitive by world standards, it will be difficult to create centre of excellence and supply the demands of the society (Reddy, 2016). In such a situation, teachers in higher education need to have highest possible degree so that the students may feel that they get the highest possible teaching. Teachers play a vital role to improve the quality of higher education therefore, teachers' accountability has assumed new significance. Teachers cannot escape from the accountability they owe to the society in the discharge of their duties as transmitter and communicators of knowledge (Balasundaram, 1997). It is the responsibility of the teacher to guide and inspire their students to enrich their knowledge and to inculcate values. Hence, it is felt necessary to prepare profile of teachers of higher education institutions in Mizoram under different categories i.e. gender, qualifications (research activity), teaching experience, academic streams, nature of appointment and age.

Objectives of the Study

1. To prepare the profile of college teachers in terms of gender
2. To prepare the profile of college teachers in terms of age
3. To prepare the profile of college teachers in terms of designation
4. To prepare the profile of college teachers in terms of qualification
5. To prepare the profile of college teachers in terms of teaching experience
6. To prepare the profile of college teachers in terms of academic streams
7. To prepare the profile of college teachers in terms of nature of appointment

Methodology of the Study

a) **Research approach**: A descriptive survey approach was used to conduct the present study

b) **Population of the study:** All the college teachers in Mizoram constituted the population of the present study.

c) **Sample:** As the number of teachers (790) is not large, all of them were covered in the study. Thus, sample selection was not done.

d) **Data collection:** The required data for the present study were collected from records of Department of Higher and Technical Education and institutions/ colleges.

e) **Statistical treatment of the study:** Descriptive statistics such as percentages were applied for treatment of data.

Analysis and Interpretation of Data:

1. Profile of College Teachers in Terms of Gender:

Gender is an important issue in every country because it is one of the most accurate indicators of a country's level of development. The more literate the women in a country, the more developed and advanced a country is. The present study took gender as an important component to understand the position of teachers at higher education level in the state. Table 1 represents the status of college teachers in terms of gender.

Table 1

Profile of College Teachers in Terms of Gender

Gender	N	%
Male	453	57.34
Female	337	42.66
Total	790	100

Source: Records and Documents from Directorate of Higher and Technical Education and Records from Colleges

Table 1 points out that among the population of 790 college teachers, 453 (57.34%) were male and 337 (42.66%) were female. This shows that discrimination on the ground of gender in education and in Mizo society is minimal, as women are well educated to enter in the field of teaching profession at college level. There may be the late entry of female in the field of teaching profession at college level due to the common attitude and social life in the early times. In early times, though there was not much discrimination on the ground of gender in Mizo society, women were often deprived from higher education which made it harder for women to qualify as teachers in higher education. But it is true to say that there has been empowerment of women

and gender inequalities has been reducing, as females now constitute more than forty percent of the total teachers.

1. Profile of College Teachers in Terms of Age:

There should be a healthy mixture of both old and younger generations in educational institutions for assurance of high quality education. The older generation can provide wisdom to the younger generation and the younger generation can give the energy, incentive and drive for change to the older generation and help them assimilate into a new era. For maintaining quality of higher education, a mixture of aged teachers and a young teachers is preferable. Aged teachers are usually experienced though maybe with lesser energy to introduce new things while younger teachers may have more energy to do new things with the advice and experience of the aged. Therefore, age profile is a crucial part of any status study.

Table 2

Profile of College Teachers in Terms of Age

Age	N	%
Below 30 Years	4	0.5
30 to 40 Years	236	29.87
40 to 50 Years	282	35.69
Above 50 Years	268	33.92
Total	790	100

Source: Records and Documents from Directorate of Higher and Technical Education and Records from College

Table 2 depicts that highest percentage of teachers (35.69%) were in the age group of 40 to 50 years; followed by 33.69% teachers who are above 50 years, 29.87% between 30 to 40 years and only 0.5% below 30 years.

It can be seen from table 2 that colleges in Mizoram are in the hands of the ideal age group as psychologically, individuals in the age group of 40 to 50 years are mature, stable and are still active in teaching and also able to cope with new technological growths. Relatively, it is thus expected that these teachers will lend their maturity of thought, expertise and professionalism and help the students for all-round development. Teachers between 30 to 40 years are also still at a productive stage and more enthusiastic in their professions. This indicates that 65.56% of teachers in colleges were at the age group of 30 to 50 years, which shows that a good number of experienced teachers with maximum potentials were in service in colleges of Mizoram.

The table also reveals that only 0.5% was in the age group below 30 years. This shows that colleges lack young teachers who are more energetic and active in practicing new techniques. Apart from this, 33.92% of the teachers are above 50 years and are therefore in the final stage of their profession and due to retire soon. The retirement of these more aged ones would offer scope and opening for recruitment of young teachers in the near future.

1. Profile of College Teachers in Terms of Designation:

There are three designations in respect of teachers in higher education, namely, assistant professors, associate professors and professors. Teachers in higher education, needs to fulfil different kinds of eligibility criteria for promotion.

Table 3

Profile of College Teachers in Terms of Designation

Designation	N	%
Assistant Professor	372	47.09
Associate Professor	402	50.89
Professor	16	2.02
Total	790	100

Source: Records and Documents from Directorate of Higher and Technical Education and Records from Colleges

Note: principals were included in associate professors

Table 3 depicts that among the college teachers 2.02% were Professors, 50.89% were Associate Professors and 47.09% were Assistant Professors.

The table reveals that nearly half of the teachers i.e. 47.09% were assistant professors, which indicates that some teachers may have had only a few years of experience and are yet to fulfil certain norms or may fail to fulfil some norms like attendance of refresher course, orientation course, seminars, workshops, publishing papers on journals and other research activities. Fortunately, there is an opportunity to be a professor for college teachers and 2.02% of teachers were eligible for it.

1. Profile of College Teachers in Terms of Their Qualification:

In the era of global competitiveness, it is of utmost importance that the products of our higher educational institutions be as competent as products of other countries; in such a situation, the quality of the teachers plays an important role. Inversely, the quality of a teacher is largely dependent on his or her educational qualification. Well

qualified teachers bring discipline in to the system and gain the trust of students which is a very important factor for quality education especially in higher education. Research and teaching should go together to maintain quality and standards in higher educational settings. In order to get the real status of higher educational institutions, investigating teachers' educational qualification is necessary.

Table 4

Profile of College Teachers in Terms of Their Qualification

Qualification	N	%
Only Masters Degree	483	61.14
Masters & NET/SLET	116	14.68
M.Phil & NET /SLET	43	5.44
M.Phil & Ph.D	16	2.03
Ph. D.	132	16.70
Total	790	100

Source: Records and Documents from Directorate of Higher and Technical Education and Records from Colleges

As shown in table 4 more than half of the college teachers were having only masters' degree without any other professional degree like NET, M.Phil, Ph.D. etc, the reason may be a good number of teachers entered into colleges before NET was required as minimum qualification. 20.12% of college teachers had qualified NET/ SLET out of which 14.68% of teachers had qualified only NET/SLET and 5.44% had received NET and M.Phil degree. Out of the total teachers only 7.47% had received their M.Phil degree, out of which 5.44% hold only M.Phil degree and 2.03% have M.Phil degree with Ph.D. Out of the total teachers at college level only 18.73% had received Ph.D degree at the time of the investigation.

From this table it can summarised that only 24.18% of college teachers in Mizoram had completed their research work (M.Phil and Ph.D), of which 15.32% of them had received their Ph.D. degree and 7.47% had received M.Phil degree. The situation paints a sad picture as majority of the teachers have not entered the field of research. Today, society has become knowledge based and colleges are expected to produce highly qualified graduates and responsible citizens who are able to meet the present and future needs of all sectors of human activity. Therefore, to build the centre of excellence it is a must for a teacher to improve their quality through research activities.

1. Profile of College Teachers in Terms of Teaching Experience:

Teaching is not merely a profession; rather it is a service to humanity (Bhatacharia, 2012). As education is the root of development for every nation and teacher being a mentor, the responsibility of teacher is most vital. Teachers not only teach their pupils but build them to become able, by giving them education. Thus, a profession of teaching not only requires a degree or a certificate of qualification, but also needs experience as well. It is an undeniable fact that no man is born experienced and everyone needs to start from the beginning and build one's own experience. It is yet true that, in every profession, a well experienced person is more capable to complete a task efficiently than the less experienced ones. This is not to say that the less experienced are not able or less capable but that experience is important. It is from the experienced teachers that the less experienced learns ones duty.

For maintaining quality of education and solidarity among teachers in giving better education, experience plays a very vital role. Table 5 shows the teaching experience of teachers of colleges affiliated to Mizoram University. For better understanding, the teachers have been divided into five groups, each group spanning a period of 5 years.

Table 5

Profile of College Teachers in Terms of Teaching Experience

Teaching Experience	N	%
Less than 5 Years	37	4.68
5 to 10 Years	161	20.38
10 to 15 Years	100	12.67
15 to 20 years	218	27.59
Above 20 years	274	34.68
Total	790	100

Source: Records and Documents from Directorate of Higher and Technical Education and Records from Colleges

Table 5 depicts that teachers having experience of more than 20 years were highest in number, i.e., 274 (34.68%) followed by teachers having 15 to 20 years of experience i.e., 218 (27.58%) and by teachers having 5 to 10 years of experience i.e., 161 (20.38%). Teachers having 10 to 15 years experience were only 100 (12.67%) and only 37 (4.68%) of teachers were having less than 5 years of experience.

It may be safe to assume teachers with more than 5 years of experience as an experienced teacher. It is clear from the table that the state has been having a stable higher education system for some time and this would be allowed to continue for the next 15 years or so. If this is the case, it could be assumed that higher education is in good hands.

On the other hand, teachers having less than 5 years of teaching experience were very few. This is not a very good sign as it is indicative that the state has not been recruiting new teachers on a large scale basis for some time. This would adversely affect the quality of higher education.

1. Profile of College Teachers in Terms of Academic Streams:

For the development of a country, no field or subject of study can be neglected. It is necessary for a country to have balanced distribution of different subjects in higher education. Academic streams like arts, science, commerce and professional courses are equally important in their own ways. In a global competitive and demanding environment, an accessible and high quality higher education system is essential for a country's economic progress. A sound higher education system supports and develops the process of economic and social development for a better future. To have such development, it is important to offer courses which ensure gainful employment. Knowing the importance of different courses; colleges of Mizoram offer different academic streams in 28 institutions.

Table 6

Profile of College Teachers in Terms of Academic Streams

Academic Streams	Colleges		Teachers	
	N	% (Out of Total 28 Colleges)	N	%
Arts	22	84.61	584	73.92
Science	6	23.07	137	17.34
Commerce	4	14.29	16	2.05
Professional	6	23.07	53	6.70
Total	28*	-	790	100

Source: Directorate of Higher and Technical Education and Records from Colleges
**There are certain colleges with multiple academic streams*

Table 6 depicts that the highest number of teachers 73.92% belong to the academic stream of arts, followed by science teachers comprising of 17.34%. 6.70% of teachers are from professional courses and only 2.02% of teachers are from commerce streams.

Out of all the colleges, 84.61% offer only arts subject and 73.92% of teachers are in these colleges. This shows that the academic stream of arts is opted by majority. This seems to be because the students often feel that arts subject can be easily learnt.

The above table also shows that a meagre 23.07% of the institutions offer science subjects, and incidentally 17.34% of the teachers are science teachers. Only 14.29% of the institutions offer commerce subject which consist 2.05% of the teachers, 6.70% of teachers are in professional courses; professional courses include law, nursing, pharmacy, teacher education (B.Ed) and computer application and constitute 6 institutions i.e. 23.07%. Looking into the distribution of the percentage of teachers across different streams, it can be felt that the numbers of teachers is very disproportionate. But, comparing the numbers of institutions offering different streams it can be seen that the numbers of teachers are well distributed.

From these findings it is strongly recommended that authorities soon realize the importance of courses which will satisfy the needs of the society and take necessary steps so that the human resource development in the academics, stream-wise is balanced.

1. Profile of College Teachers in terms of Nature of Appointment

There has been shortage of teachers in different departments of different colleges in Mizoram. Realising the problem and situation, the government of Mizoram as such recruited a number of teachers on contractual basis and as part time lecturers according to the guidelines and ordinances of Mizoram University. According to the ordinance of Mizoram University, every department in every college must have at least a minimum of four teachers and a minimum of five teachers in the languages. But aside from colleges in Aizawl district, there are many posts lying vacant throughout Mizoram.

Table 7

Profile of College Teachers in Terms of Nature of Appointment

Contract		Part Time		Regular		Total
N	%	N	%	N	%	N
80	7.71	168	16.18	790	76.11	1038

Source: Directorate of Higher and Technical Education and Records from Colleges

Table 7 depicts that, there are 790 (76.11%) permanent teachers, 168 (16.18%) part time and 80 (7.71%) contractual teachers.

Teachers recruited on contractual basis and part time are posted in different colleges in different departments depending on the need of the colleges. It can be seen from the table 7 that 24% of the teachers are non-regular teachers. Therefore, it can be

assumed that in spite of the need of the hour, recruitment of regular teachers is not conducted by the authorities. There are certain reasons for faculty posts remaining vacant; the state government with the aim of saving finances on salaries of full-time faculty is not doing the needful. Moreover, the recruitment process through the Public Service Commission is often time-consuming and hence not being followed.

Major Findings of the Present Study

1) Among college teachers, 57.34% were male and 42.66% were female.
2) Among the college teachers 33.92% were above 50 years of age, 35.69% of them were between 40 to 50 years, 29. 87% were between 30 to 40 years and only 0.5% of them were below 30 years of age.
3) Among college teachers 2.04% were professors, 50.87% were associate professors and 47.09% were assistant professors
4) Highest percentage of teachers i.e. 61.14% had only master degree in their concerned subjects, 14.68% of teachers had qualified National Eligibility Test (NET), 5.44% of teachers were having M.Phil degree with NET, 16.70% were Ph.D. degree holder, and only 2.03% were having both M.Phil & Ph.D. degree.
5) In case of teaching experience 4.68% of teachers were having less than 5 years of teaching experience, 20.38% were having 5 to 10 years of teaching experience, 12.67% having 10 to 15 years of teaching experience, 27.58% were having 15 to 20 years of teaching experience, 34.68% were having more than 20 years of teaching experience.
6) The highest percentage of teachers 73.92% were in arts stream, followed by 17.34% in science, 6.70% in professional courses and only 2.02% of teachers were in commerce stream.
7) In terms of appointment, 76.11% were permanent teachers, 16.18% were part time and 7.71% were contractual basis.

Conclusion

The finding of the present study reveals that gender gap among college teachers is small which indicates that gender discrimination is minimal among the Mizo society. The findings in terms of their age portray that there are only 0.5 percent of teachers below 30 years at college level. Apart from this more than thirty percent of the teachers are on the last stage of their profession and will retire soon.

Teachers play a major role in enhancing the academic standards of any university or college. In fact quality of the teachers is the most critical factor in imparting high

quality education. Therefore, today in a globalized competitive world, teachers of higher education need to enter in the field of research so as to produce the best quality students who will accelerate the process of emergence of knowledge society. However, the findings of the present study with regard to the educational qualifications of college teachers reveal that majority of them have only master degree as the highest qualification, and only 24 percent of them have done research i.e., M.Phil. and Ph.D. The reasons behind the less number of teachers in colleges in Mizoram with research degrees may either be because of lack of interest in research on the part of teachers or non-linkage of promotion to higher rank/scale with research degree or non-availability of facilities for research. Hopefully, with establishment of Mizoram University in 2001, the opportunities for college teacher to pursue research has extensively increased and it is expected that in the near future more and more of college teachers will take up their doctorate level research in their respective disciplines.

The findings of this study also reveal that a sizeable number of faculty positions in colleges are lying vacant for quite some time. Due to the financial crunch in the state government, a large number of teachers have been hired on contractual and part time/guest basis who are paid consolidated honorarium without allowances and other benefits; and do not have any security that senior teachers have in terms of stability. If they are not guaranteed a more permanent arrangement they may be looking for other positions which could stand to compromise the status of quality of higher education. Moreover, looking at the growing number of students with the current semester system, there is an urgent need to recruit more regular teachers.

References:

Ariff, M.S. (2007). Total quality management implementation in higher education; concerns and challenges faced by the faculty. *Best Practices in Education & Publi*c, 07 (03), 1-23. Retrieved from http://bm.nsysu.edu.tw/tutorial/iylu/12th%20ICIT/07-03.pdf

Balasundaram, S.N. (1997). A call for teacher accountability for quality management :National Accreditation Council. *The Hindu,* January 7

Bhatacharia, J. (2012). Higher education in India: Issues, concerns and remedies. *University News, 50*(17), 1.

Naik, P.K. (2015). Globalization and its impact on higher education in India. *International Journal of Humanities and Management Sciences (IJHMS)* 3, 414-415. Retrieved from http://www.c3l.uni-oldenburg.de/cde/OMDE625/Todaro/Todaro%20Chapter%2011.pdf

Reddy, P.K. (2016). Shortage of teachers in higher education institutions in India. *University News,* 54 (03), 9.

A Study of Self-concept among Secondary School Students of Champhai Town, Mizoram with reference to Gender and Type of School

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Abstract

Self-concept is "the set of perceptions or reference points that the subject has about himself; the set of characteristics, attributes, qualities and deficiencies, capacities and limits, values and relationships that the subjects knows to be descriptive of himself and which he perceives as data concerning his identity" (Hamachek, 1981, as quoted by Machargo, 1991: 24). This study was conducted to find out the level of self-concept among secondary school students of Champhai town, Mizoram. The sample of the present study consisted of 210 students from secondary schools of Champhai town. Self-concept rating scale was used to find out the level of self-concept. It was found that secondary school students of Champhai town had low level self-concept. Gender and school wise analyses were also done by testing the hypothesis to find out the significant differences in their self-concept level. Significant difference in their level of self-concept was found between male and female students whereas school wise analysis showed no difference.

Keywords: *Self-concept, Secondary school students, Gender, Type of school.*

Introduction:

The world today is a highly competitive world in all walks of life. Education is assuming an increasingly important role in society and everybody desires to climb the ladder of successful performance as high as possible. As a result of this, parents have high expectations from their children, who remain under a lot of pressure to strive, aspire and achieve more and more. This is especially affecting the adolescents who are at a major threshold of life. At every stage in life, the academic record speaks for the individual, especially in developing countries like India. Whether it is for admission to a course, or entrance in a job, or scholarship or for further studies, good academic

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results remain to be a very important recommendation. Achievements in various walks of life in general and academic achievement in particular are the corner stone for successful living in today's competitive society. Educational excellence contributes significantly to the academic success and professional placement of an individual.

Self-concept:

Self-concept is "the set of perceptions or reference points that the subject has about himself; the set of characteristics, attributes, qualities and deficiencies, capacities and limits, values and relationships that the subjects knows to be descriptive of himself and which he perceives as data concerning his identity" (Hamachek, 1981, as quoted by Machargo, 1991: 24). It is the set of knowledge and attitudes that we have about ourselves; the perceptions that the individual assigns to himself and characteristics or attributes that we use to describe ourselves. It is understood to be fundamentally a descriptive assessment and has a cognitive nuance.

According to Rogers (1947), self is the central ingredient in human personality and personal adjustment. He described the self as a social product developing out of interpersonal relationships and striving for consistency. Self-concept is viewed as a store of self-perceptions. It is noted as an in-borne nature but is acquired and is continuous as well as dynamic. It is an organized cognitive structure comprised of a set of attitudes, beliefs and values that cuts across all the facets of experiences and actions. This Self-concept is thought as one of the most crucial components of personality as it encompasses a person's own notions of abilities, emotional tendencies, socioeconomic status, intelligence and mental health. Self-concept is a central theme around which revolves a large number of major aspects of a person's thoughts and feelings, strivings and hopes, fears and fantasies, his views of what he is, what he has been, what he might become and his attitudes pertaining to his worth (Jersild, 1960). According to Purkey (1998), "Self-concept is the totality of a complex, organized and dynamic system of learnt beliefs, attitudes and opinions that each person holds to be true about his or her personal existence". Hall and Lindzey (1957) point out two different meanings of Self-concept. The first denotes the person's attitudes, feelings, perceptions and evaluations of himself. The second meaning involves a group of psychological processes which govern behaviour and adjustment of the person.

Need and importance of the study:

The Secondary school students who are at their adolescence are at the threshold of adulthood and under lot of stress. Research conducted over the years have revealed that adolescence is the most crucial and critical period of one's life. It is a time of dreaming about the future when they aspire to reach the goals to fulfill their own and their parents' expectations. Of all the stages of human growth and development,

adolescent is the most impressionable period of human life on the one hand and also the most critical and confusing period on the other hand. Rapid physical, mental, emotional, social, intellectual, imagination and sexual developments take place during adolescence period. Young adolescents need continuous guidance to possess positive Self-concept in order to develop successfully in every sphere of their life. The behaviour and decisions taken by the adolescents are directly related to their Self-concept. At present, society is facing different problems which have close relation with the adolescents like juvenile delinquents, rape, robbery, drug addiction, murder and suicide, etc. The root of such problems is found to be the personality disorder among adolescence. It is due to lack of our understanding about such problems, situation has become serious for all of us. With proper knowledge, care and understanding about the adolescents, such situations may be handled very smoothly. So, there has been long felt need for such study.

Objectives of the study:

1. To study the level of Self-concept among secondary school students of Champhai town
2. To compare the Self-concept level of Male and Female students of Champhai town
3. To study the differences between level of Self-concept between Government and Private Secondary school students of Champhai town

Hypotheses of the study:

The following hypothesis were tested in this study:

1. There is no significant difference between Self-concept level of Male and Female students of Secondary schools of Champhai town.
2. There is no significant difference between Self-concept level of Government and Private Secondary school students of Champhai town.

Methods:

Descriptive survey method is adopted for the study.

Population and sample:

The population includes all the Secondary school students within Champhai town. There are 15 Secondary schools in the town area. For the present study, 6 Government and 5 Private schools were selected as the sample schools. A sample of two hundred and ten (210) students was taken from 9th standard of 11 Secondary school of Champhai town.

Tools used:

For collection of data, Self-concept Rating Scale (SCRS) developed by Dr. Pratibha Deo was used. Reliability was estimated by test re-test method. For the 15

days' interval, the reliability co-efficient came out to be .89 (N = 595). Taking different time intervals from 15 days to 3 months, the co-efficients of correlation ranged from .62 to .86 (N ranging from 65to 70) The correlations between consistency scores ranged from .84 to .98. These values indicate a high degree of consistency. It did not reveal any marked difference in the Self-concepts of individual over these periods. This proves that the SCRS gives a stable and reliable measure of Self-concept.

Mode of data collection and analysis:

Collection of data:The data collected from the sample schools of Champhai town were tabulated after finishing the scoring on the Self-concept Rating Scale using the standard scoring procedure given in the manual. Each student was assigned a serial number. The scores of Self-concept were entered following the column designed for each variable.The responses obtained from the subjects were scored following the standard procedure described in the manual. The scores were classified, tabulated and analysed and the details were given in the form of table.

Data analysis:The analysis of the data was carried out with the help of appropriate statistical techniques like percentage and t-test.

Analysis and Interpretation of data:

1. Level of Self-concept of Secondary school students of Champhai town:

The Self-concept level of the students were obtained from the scores of the Self-concept Rating Scale by comparing with Self-concept Norms table. The Raw scores from the scale were converted to z-score by using z-score norms table provided in the Self-concept rating scale manual. The Self-concept level of each of the students were found out and the number of students for each of the levels were shown in table 1:

TABLE 1

Number of students for each level of Self-concept

S/No	Self-concept Status	Grade	z-score Range	No. of Students	Percentage
1	Very High Level	A	+2.01 and above	0	0
2	High level	B	+1.26 to +2.00	0	0
3	Above Average Level	C	+0.51 to + 1.25	1	0.48
4	Average Level	D	-0.50 to +0.50	22	10.48
5	Below Average Level	E	-0.51 to -1.25	81	38.57
6	Low Level	F	-1.26 to -2.00	82	39.05
7	Very Low Level	G	-2.01 and below	24	10

As depicted in table no. 1, there was no student having high very high and high level of Self-concept (Grade A & B). There is only one student i.e. 0.48 percent of the total samplewith above average level (Grade C) of self concept status. 22 (10.48%) students fall in the status of average level of self concept. There were 81(38.57%) students having below average level (Grade E). 39.05 percent of the total sample (82 students) possessed low level self concept and the rest 10 percent i.e. 24 students were in the very low level self concept status.

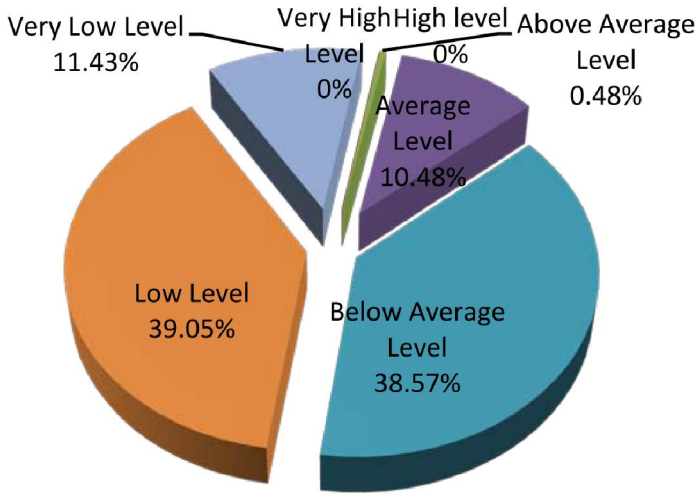

Figure 1: Pie Chart showing the percentage of different levels of Self-concept of the students.

2. ***Comparison of Self-concept level of Male and Female students***.

Comparison of Self-concept level of Male and Female students were done by testing the null hypothesis by using t-test.

H_0 = There is no significant difference in the level of Self-concept between Male and Female students of Secondary schools of Champhai town

TABLE 2

Comparison of Self-concept level of Male and Female students.

Self-concept	N	Mean	SD	MD	SEM	t-value	Sig. level
Male	105	89.52	16.78	7.89	1.63	3.06	0.01
Female		81.63	20.29		1.98		

Analysis of data vide table 2 reflect the result for the test of significant differences between Male and Female students of Secondary schools in relation to their level of Self-concept. The mean value for Male and Female students is 89.52 and 81.63 respectively. This tables shows that the test is significant at 0.01 level. So, there is a difference between male and female in relation to their self concept status.

Therefore, the null hypothesis, *there is no significant difference in the level of Self-concept between Male and Female students of Secondary schools of Champhai town is* rejected. This finding implies that Self-concept level of Male and Female students are significantly different. Male students were considered to have higher Self-concept than Female.

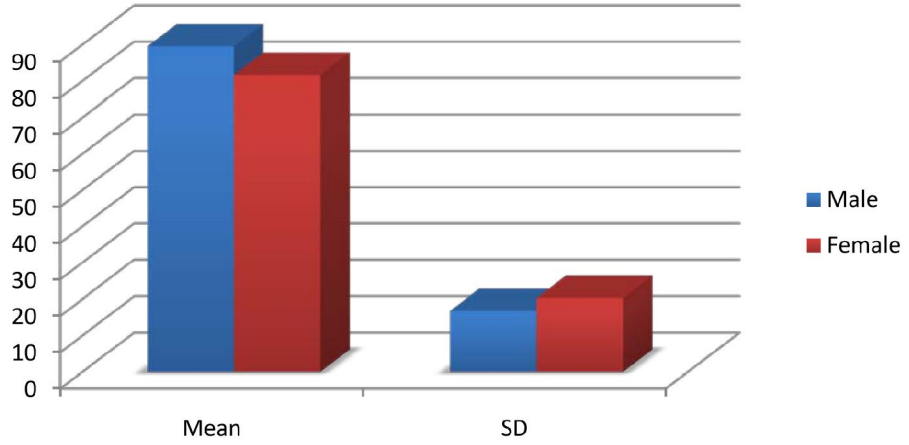

Figure 2: Bar graph showing the Mean scores of Self-concept level of Male and Female students of Secondary schools of Champhai town.

3. ***Comparison of Self-concept level of Government and Private Secondary school***.

Analysis of Self-concept level of Government and Private students were done by testing the null hypothesis using t-test.

H_0 = There is no significant difference in the level of Academic Achievement between Government and Private Secondary school students of Champhai town.

TABLE 3

Comparison of Self-concept level of Government and Private Secondary school.

Self-concept	N	Mean	SD	MD	SEM	t-value	Sig. level
Government	120	84.13	18.43	3.38	1.68	1.27	N.S
Private	90	87.51	19.65		2.07		

Table no. 3 shows the result for the test of significant difference between Government and Private school students of Champhai town in relation to their Self-concept level. The mean value of Government school students and Private school students is 84.13 and 87.51 respectively and the test is not significant.

Therefore, the null hypothesis, *there is no significant differences in the level of Academic Achievement between Government and Private Secondary school students of Champhai town* cannot be rejected. However, the mean score of private secondary school is higher than that of Government Secondary school.

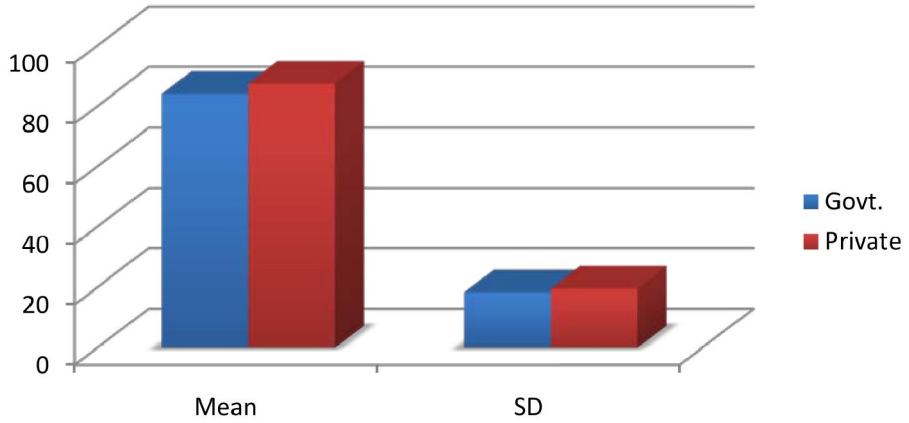

Figure 3: Bar graph showing the Mean scores of Self-concept level of Government and Private school students of Champhai town.

Findings and Discussion:

The overall self concept status of the sample secondary students of Champhai town was found to be low. It was found that, no students possessed very high and high level of self concept. Majority of the sample were fall in the category of below average and low self concept status. It was also found that there were as many as 24 students who possessed a very low level self concept. The reason for lower Self-concept level among Secondary school students of Champhai Town may be due to various factors. These factors may include intelligence, background of the family, parent's educational qualification, socio-economic status and even the academic background of the students.

With respect to gender, there is difference in the level of Self-concept between Male and Female students within Secondary schools of Champhai town. The mean value of male and female shows that Male students have higher level of Self-concept than the Female students. Similar result was found in the study of Puju and Netragaonkar (2014) on comparison of undergraduate Male and Female students on Self-concept. Gender differences provide with it, differences in attitude, ability, skills, etc.

With respect to the type of school, there is no difference in the level of Self-concept between Government and Private Secondary school students of Champhai town. Though the test is not significant, there is difference in the mean value between Government and Private school students. Private school students have higher mean value than Government school students in their Self-concept level.

Conclusion:

Self concept status of a person is a very important determinant of one's success. It is clear from this study that the secondary students of Champhai District possessed low level self concept and this could affect their future endeavor. Among the students, female student's self concept was found to be lower than that of male students. This clearly indicates the needs of developing self concept among the secondary students of Champhai District in general and Female secondary students in particular. To develop self concept among secondary students, schools play an important role and it is quite crucial for the teacher to provide necessary help to their students to develop self concept apart from the usual classroom teaching and learning.

References:

Aggarwal, J.C. (2007). *Essentials of educational psychology*. (2nd Ed.). New Delhi: Vikas Publishing House Pvt. Ltd.

Amrinder, K. and Agyajit, S. (2017). Self-concept of adolescents in context to their gender, location and type of schools. *Indian Journal of Health and Wellbeing.* Hisar8.3 (Mar 2017): 188-190.Retrieved from *http://search.proquest.com/openview/7d00ff521c11a95c2e457962a82da66c/1?pq-origsite=gscholar&cbl=2032134* on June, 2017

Chauhan, S.S (2007) *Advanced educational psychology (7th Ed.)*. New Delhi: Vikas Publishing House Pvt. Ltd.

Hall, C.S., Lindzey, G. (1957). *Theories of personality (2nd Ed).* New York: John Wiley & Sons, Inc.

Hamachek, S. (1981). Self concept and school achievement: Intercation dynamics and a tool for assessing the self concept component. *J. Counselling Development,* 73 (4) : 419-425.

Jain, M, Pasrija P & Divya. (2015). Emotional maturity and self-concept among senior secondary school students. *Bhartiyam International Journal of Education & Research*, 4 (III), Retrieved from *http://gangainstituteofeducation.com/june/4.pdf* on November, 2016

Jersild, A.T. (1960). Social and individual origins of the self. *Child psychology. 5th ed.* Englewood Cliffs, N.J: Prentice Hall. p. 116 -126.

Liu, W.C. & Wang, C.K.J. (2005). Academic self-concept: A cross-sectional study of grade and gender differences in a Singapore Secondary school. *Asia Pacific Education Review* 6(1), 20-27. Retrieved from *http://files.eric.ed.gov/fulltext/EJ728824.pdf* on April, 2016\

Machargo, D. (1991). The causal ordering of self concept and academic motivation and its effect on academic achievement. *Journal of Education, 7(4): 534-546.*

Preckela, F. et.al. (2013). Self-concept in adolescence: A longitudinal study on reciprocal effects of self-perceptions in academic and social domains. *Journal of Adolescence,* 36(6), 1165–1175. Retrieved from *http://www.sciencedirect.com/science/article/pii/S0140197113001334* on November, 2016

Puju, J.A. & Netragaonkar, Y.D. (2014). Self-concept and academic achievement of under-graduate male and female students of Kashmir. *Scholarly Research Journal for Humanity, Science & English Language*, I(V). Retrieved from *http://www.srjis.com/pages/pdfFiles/* .

Purkey, W.W. (1988). An overview of self-concept. *Theory for Counselors: An ERIC/CAPS Digest.*

Roger (1947). Meaning of self concept. *Shodhganga.inflibnet10603/3238/8/08_chapter%201.pdf.* Retrieved from http://shodhganga.inflibnet.ac.in/bitstream/.

Yadav, R. (2015). Self-concept, study habits and academic achievement of high school students studying in govt. and public school. *Edutracks 4(6), 35-36.*

Zyoudi, A. M. (2007). Gender differences in self-concept among adolescents with low vision. *International Journal of Special Education. Vol 22 No1 2007.*

Mental Health in Relation to Academic Achievements and Stream of Study Among Private Higher Secondary School Students in Aizawl

Lalnunhlui*
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Abstract

The purpose of the study was to measure the relationship between mental health with academic achievement and also, stream of study among higher secondary school students within Aizawl city. A sample of 150 Science students and 150 Commerce students in class 11 were selected randomly from Aizawl city, a capital of Mizoram. Mental Health Scale (MHS) developed by Dr Sushma Talesara and Dr Akhtar Bano were used as a tools for data collection and the academic performances of the samples were collected. T test was used to determine the significance of difference. The study found that there was significant difference between mental health and academic achievement of higher secondary school students, and there was a significant difference between mental health of Science and Commerce students of higher secondary schools in Aizawl city.

Keywords: *Mental health, Academic achievement, Stream of study, Private Higher Secondary schools.*

Introduction

Mental health refers to our overall psychological well-being. It includes the way we feel about ourselves, the quality of our relationships, and our ability to manage our feelings and deal with difficulties. Good mental health helps us to enjoy life and cope with problems and offers a feeling of well-being and inner strength. Being mentally or emotionally healthy is much more than being free of depression, anxiety, or other psychological issues, it refers to the presence of positive characteristics such as optimism, self-awareness, confident, adaptable, flexible, reliable, self-sufficient, fair, etc.

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A person needs to maintain and boost their mental health in order to achieve and determine a better future. For instance, students with poor mental health may experience problems related to adjusting to classroom and school relations. The loneliness and isolation that often accompany mental health problems like depression can result in interpersonal problems that make it difficult for some students to connect with others. These adjustment-related difficulties may occur easily among students who come to school with an already diagnosed mental illness. This need to be taken into consideration that mental health can largely affect the activities of a person and that the outcome may be largely influenced.

There are some studies taken up regarding mental health in India. **Talawar & Das** (2014) studies found that there was a significant relationship between academic achievement and mental health of secondary school tribal students of Assam. Then, **Chakraborty** (2014) found that achievement in environmental education and mental health is not uniformly significant. However, students belonging to Arts, Science and Commerce stream expressed different achievement in Environmental education. Also, **Dhara & Jogsan** (2014) revealed that better academic achievement was found among non-orphan students rather than orphan students. The academic achievements increased as mental health increase which means that there was a positive correlation between mental health and academic achievements of orphan and non-orphan students. However, a study conducted by **Louis V. L Rinsangi** (2013), revealed that students from Science streams in Aizawl district were more mentally healthy than those from Arts and Commerce streams.

Need and importance of the study

Students with mental health problems may lack the level of curiosity, engagement and involvement which are found in their peers without these difficulties. If a student possesses such complications about mental health, he/she may not be able to perform well in his/her studies which may largely affect his/her behaviour and activities. So, the teacher must be aware of mental health of their students. Thus it is necessary to study about the mental health of the students and how the level of mental health affects the activities and the progress of the students especially in their academic performances. Regarding the study of mental health, there were some studies which are taken up in India and other countries. But, a reliable study was not made among the Mizo students in Aizawl city. Hence, the investigator felt the need to study mental health and how it effect academic achievements, and how stream of study such as Science stream and Commerce stream can affect mental health among the adolescence students in higher secondary schools within Aizawl city.

Objectives of the study

1. To find out the mental health in relation to their academic achievements among higher secondary school students within Aizawl city.
2. To compare mental health of Commerce and Science students of higher secondary schools in Aizawl city.

Hypothesis of the study

The following were the hypothesis of the present study:-

1. There is no significant difference between mental health and academic achievement of higher secondary schools' students in Aizawl city.
2. There is no significant difference between mental health of Commerce and Science students of higher secondary schools in Aizawl city.

Research methodology

For the present study, the investigator was employing the descriptive method of research in which both primary and secondary data concerning different objectives were collected from appropriate source. The methodological details like sample, tool, procedure of data collection, scoring procedure and statistical techniques are given below.

Sample: The sample of present study consists of 300 students (150 Science students and 150 Commerce students) of private higher secondary school in Aizawl city. There were 75 female students among Science and Commerce students and also 75 male students among the sample as well

Tool used: The investigator used a standardised questionnaire, Mental Health Scale (MHS) developed by Dr Sushma Talesara and Dr Akhtar Bano only as a tool for collecting a data.

Data collection: The investigator randomly selected different private Higher Secondary Schools in South, Central and North areas of Aizawl city and visited them to ask for the permission of the principal to administer the tool on the selected sample students of class XI. After getting permission, the investigator had made a good rapport, and was administering the test on the students. Also, the academic achievement of each sample in HSLC was taken.

Scoring procedure: There were 54 items in the questionnaire. Out of these, items 1 to 29 were negative statements and item 30 to 54 were positive statements. The scoring and level of Mental Health was measured by the following table-

Table 1: Scoring system for each items

Type of item	Always	Often	Sometimes	Rarely	Never
Positive	4	3	2	1	0
Negative	0	1	2	3	4

Statistical techniques used: In order to analyze and interprete data, statistical techniques such as mean, standard deviation and t-test were used.

Analysis and interpretation of data

For analysis and interpretation of data, the study has been analyzed in different tables. The same is present here.

Table 2: Mental health in relation to academic achievements

Particulars	Number	Mean	SD	t value	Table t value
Above 60%	221	139.79	16.69	11.61	2.61 at 0.01 1.97 at 0.05
Below 60%	79	117.39	13.91		

Analysis of data vide table 2, the calculated mean and standard deviation of scores for students scoring above 60% were 139.79 and 16.69 respectively, and that of students scoring below 60% were 117.39 and 13.91 respectively. Thus, the value of 't' was then calculated to test the hypothesis. It was found that the calculated t value (11.61) was greater than the critical t value (2.61 at 0.01 level and 1.97 at 0.05 level). So the hypothesis was rejected. Hence, it was determined that there was a significant difference between mental health and academic achievement of higher secondary school's students in Aizawl city.

Table 3: Mental health in relation to academic achievements among male sample students

Particulars	Number	Mean	SD	t value	Table t value
Above 60%	110	140.86	13.64	12.29	2.62 at 0.01 1.98 at 0.05
Below 60%	40	114.29	10.99		

As per table 3, the significant difference was tested on mental health in relation to academic achievements among the male samples. There were 110 male students scoring above 60% and 40 male students who scored below 60%. The calculated mean and standard deviation of scores for male students scoring above 60% were 140.86 and 13.64 respectively, and that of male students who scored below 60% were 114.29 and 10.99 respectively. Then the value of t was calculated. It was found that the calculated t value (12.29) was greater than the critical t value (2.62 at 0.01 level and

1.98 at 0.05 level). So, it was determined that there existed significant difference between mental health of male sample students of higher secondary school in relation to their academic achievements.

Table 4: Mental health in relation to academic achievements among female sample students

Particulars	Number	Mean	SD	t value	Table t value
Above 60%	111	140.17	19.26	5.87	2.62 at 0.01
Below 60%	39	121.86	15.84		1.98 at 0.05

As per table 4, the significant difference was again tested on mental health in relation to academic achievements among the female students. There were 111 female students scoring above 60% and 39 female students who scored below 60%. The calculated mean and standard deviation of scores for female students scoring above 60% were 140.17 and 19.26 respectively, and that of female students who scored below 60% were 121.86 and 15.84 respectively. The value of t was then calculated. It was found that the calculated t value (5.87) was greater than the critical t value (2.62 at 0.01 level and 1.98 at 0.05 level). So, it was determined that there existed a significant difference between mental health of female students of higher secondary school in relation to their academic achievements.

Table 5: Mental health in relation to stream of study

Particulars	Number	Mean	SD	t value	Table t value
Science	150	137.49	17.74	3.55	2.60 at 0.01
Commerce	150	129.83	19.65		1.97 at 0.05

As per table 5 had shown, there were 150 Science students and 150 Commerce students among the samples. The calculated mean and standard deviation of scores for Science students were 137.49 and 17.74 respectively, and that of Commerce students were 129.83 and 19.65 respectively. The value of 't' was then calculated to test the hypothesis. It was found that the calculated t value (3.55) was greater than the critical t value (2.60 at 0.01 level and 1.97 at 0.05 level), so the hypothesis was rejected. Hence, it was determined that there was significant difference between mental health of Science and Commerce students of higher secondary school in Aizawl city.

Table 6: Mental health in relation to stream of study among male samples

Particulars	Number	Mean	SD	t value	Table t value
Science	75	136.19	17.30	1.86	2.62 at 0.01
Commerce	75	130.80	18.05		1.98 at 0.05

As per table 6, there were 75 male Science students and 75 male Commerce students. The calculated mean and standard deviation of scores for male Science students were 136.19 and 17.30 respectively, and that of male Commerce students were 130.80 and 18.05 respectively. The value of 't' was then calculated. It was found that the calculated t value (1.86) was less than the critical t value (2.62 at 0.01 level and 1.98 at 0.05 level). So, it was determined that there was no significant difference between mental health of male Science students and male Commerce students of higher secondary school.

Table 7: Mental health in relation to stream of study among female samples

Particulars	Number	Mean	SD	t value	Table t value
Science	75	139.11	18.22	2.98	2.62 at 0.01 1.98 at 0.05
Commerce	75	129.47	21.23		

From table 7, it was shown that there were 75 female Science students and 75 female Commerce students. The calculated mean and standard deviation of scores for female Science students were 139.11 and 18.22 respectively, and that of female Commerce students were 129.47 and 21.23 respectively. The value of 't' was then calculated. It was found that the calculated t value (2.98) was greater than the critical t value (2.62 at 0.01 level and 1.98 at 0.05 level). So, it was determined that there existed significant difference between mental health of female Science students and female Commerce students of higher secondary school in Aizawl city.

Major findings of the study

1. There was significant difference between mental health and academic achievement of higher secondary school's students in Aizawl city. Similar result was found among male and female students.
2. There was no significant difference between mental health of Science and Commerce students of higher secondary school among male students in Aizawl city while there existed a significant difference between mental health of Science and Commerce students of higher secondary school among female students in Aizawl city. However, regardless of gender, it was determined that there was a significant difference between mental health of Science and Commerce students of higher secondary school in Aizawl city.

Conclusions of the study:

This study revealed that there was significant difference between mental health and academic achievement of higher secondary school's students in Aizawl city. Similar results were also found in the research done by Dhara & Jogsan (2014) and Talawar & Das (Nov 2014) although a study conducted by Chakraborty (2014) found that achievement in environmental education and mental health is not uniformly significant.

This showed that mental health had largely affected academic achievement and that there was a true relation among mental health and academic achievements. This study made clear that the students who did well in their academic performance were mostly having better mental health, which was the same in different parts of India as it was shown clearly by different studies taken up in the country.

However, this study found out that female students were found to score lower in MHS than male students, but stream of study was found to affect mental health among them as there was a significant difference between mental health of Science and Commerce students among female students, which was not the case among male students. But it was found that there was a significant difference between mental health of Science and Commerce students, regardless of gender. This finding was similar with a study conducted by Louis V. L Rinsangi (July 2013), which revealed that students from Science streams were more mentally healthy than those from Arts and Commerce streams. Although the study by Miss Louis was conducted in Aizawl district, this study felt the need to delimit the study and investigate the students in Aizawl city only, and proved that the results of the past study was similar with the present study.

Secondary level of education is a gateway for higher education in the life of students. So, students at this stage should have good mental health as well as physical health in order to achieve ultimate level they can reach. Good mental health of students is essential for their continued educational growth and for creating a good emotional climate in the school where they spent many hours. Good mental health often has a bearing on making the right decisions as well. Students need a stress-free environment and good mental health to fulfil their responsibilities.

References:

- Chakraborty, G. (2014 Aug). Achievement in environmental education in relation to mental health, environmental awareness and stream at higher secondary level. *Edutracks,* 13(12), 44-15
- Dhara R. D. & Jogsan, Y. A. (2014). A study of mental health and academic achievement among orphan and non-orphan students. *International Journal of Current Research and Academic Review*, 2(1), 1-7
- Rinsangi, Louise V.L. (2013 July). *Mental health of higher secondary students of Mizoram in relation to their socio-economic status, gender and stream of study*. M.Phil, Dissertation. Department of Education, Mizoram University, Mizoram.
- Talawar, M.S. & Das, A. (2014). A Study of relationship between academic achievement and mental health of secondary school tribal students of Assam. *Indian Journal of Research*. 3(11), 55-57

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