



## “Faculty Training and Development of Higher Education Institutions in Nagaland”

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**Abstract :** The study aims to identify the existing types of faculty training and development programs conducted/organized by Higher Education Institutions in Nagaland and also to identify the types of training and development programs attended by faculty of Higher Education Institutions in Nagaland. The study employed a descriptive survey method and primary data was collected through structured questionnaires using dichotomous responses: Yes/No. Purposive sampling method was used for sample selection of faculty members and convenience sampling method was employed for the selection of Institution Head's. The study examined the responses of 44 Institution Heads and 396 faculty members of various Higher Education Institutions in Nagaland. The data obtained were analyzed using Descriptive Statistics. The study identified that the Higher Education Institutions in Nagaland conducted/organized workshops, seminars, and conferences at large, where as training programs like faculty development programs, faculty induction programs, quality improvement programs, skill development programs, leadership development programs, administrative training programs, online training programs were organized/conducted very less or were not organized/conducted at all by many Higher Education Institutions in Nagaland. The study also found that faculty members of Higher Education Institutions in Nagaland had attended various types of faculty development programs where a majority of the faculty member have attended seminars, conferences, workshops, faculty development programs, and presented papers in seminars, conferences, and symposiums.

**Index Terms – Development, Faculty, Higher Education Institutions, Nagaland, Quality, Service, Training**

### I. INTRODUCTION

In any Academic Institution, faculty members who impart knowledge and skills to students are considered as the most important resource among all other resources (Kabat et al., 1989) that needs to be constantly developed through effective training and development activities (Madzik & Hrniciar, 2013). It is anticipated that the responsibility for such development falls largely on the individual; however, the Institutions also bear the moral and professional responsibility to forward the growth and development of those appointed faculty members (Chalmers, 1992). A faculty member is still a major source of knowledge and development for the students. Identifying the “needs” of a faculty member is the gap between the faculty members existing competencies and what is essential and requisite to qualify for a position of higher responsibility. According to Mackinnon (2003), faculty member as a valuable resource, their development must be considered an essential element by fostering encouragement, unyielding support, and enabling faculty members to meet individual goals along with which the Institution goals are also met. The demand for increasing standard in quality of education further demands the need for continuous faculty development programs (Opoku-Asare, 2004). James (1990); Winston (1999) argued that higher education is undergoing serious transformation pertaining to international competition, increase in diversity among students, and advancement in information technology. Many researchers have asserted that traditional education practices cannot generate high level thinker/workers required for the labor markets. These changes have led universities globally to innovate programs aimed at providing resources to increase the effectiveness of teaching-learning process. Faculty vitality is the central element to enhance excellence in education and hence a greater emphasis on faculty members for the development, improvement, and enhancement of teaching-learning quality.

The American Association of Higher Education (AAHE) has defined faculty development as “the theory/practice to assist enhanced faculty performance in multiple disciplines including institutional, intellectual, personal, social, and pedagogical”. Centra (1978) defined faculty development as a wide array of activities that Institutions employ to revamp or support faculty in performing numerous roles. According to Bland et al., (1990) faculty development is a planned program aimed to prepare Institutions and faculty members in performing various academic roles and to develop faculty members’ knowledge and expertise in the area of teaching, research, and administration. The goal of faculty development is to equip faculty members with the knowledge and skills relevant as demanded by the current requirements and to sustain their vitality for both present and future (Whitcomb, 2003). Faculty Development in Higher Education is conceptualized by Gaff (1975) as those activities focused on improving faculty members teaching skills, to design improved curriculum, and to augment the Institutional climate for quality education. Reigle (1987) identified a number of descriptions for the term “faculty development” which are as follows:

- i. Instructional development that emphasized on the development of faculty members skill in the use of instructional technology, small-group teaching, courses, and curriculum design.

- ii. Professional development that emphasized on the development of individual faculty members to execute their professional responsibilities as educators, mentors, researchers, and administrators.
- iii. Organizational development that emphasized on the requirements, aims, goals, and concerns of the Institution.
- iv. Career development which emphasized on faulty preparation for career progression and advancement.
- v. Personal development which emphasized on interpersonal skills, communication skills, and leadership skills for faculty members.

Along the same line, Centra (1989) proposed the following areas of focus for faculty development in an academic institution:

1. Personal Development which emphasized on interpersonal skills, development of career progression and life planning issues of a faculty member.
2. Instructional Development which emphasized on ability to develop course design and the use of instructional technology.
3. Organizational Development which emphasized on ways to improve the institutional environment that support effective teaching-learning.
4. Professional Development which emphasized on ways to support faculty members fulfils their multiple roles of teaching, mentor, research, and quality service.

Wilkerson & Irby (1998) emphasized that faculty development programs vary widely from institution to institution, consisting of both formal and informal offerings and proposed that an absolute faculty development program should encompass the following focus areas: (i) professional development, (ii) instructional development, (iii) leadership development, and (iv) organizational development. Wilkerson & Irby (1998) further suggested that workshops and students' ratings of instruction, coupled with consultation and intensive fellowships, are effective strategies for changing teachers' actions. A Comprehensive faculty development empowers and allows faculty members to excel as educator and to produce dynamic learning community that value teaching and learning. According to Marrant (1981) the starting point of faculty training and development is aimed at meeting faculty members' professional need which is predictably many and varied and identified four major professional needs of faculty members, which include induction need, extension needs, refreshment needs, and conversion needs. According to Bergquist & Phillips (1975), research also suggested that a comprehensive program of faculty development is one which accordingly provides training for faculty in enhanced classroom presentation, assist the faculty member in creating an encouraging environment within the academic organization, and which allows to examine and reflect personal values and attitudes of the faculty members as it immensely influences their professional life too. Instructional, Organizational, and Personal Development thus become the indispensable components of any successful and effectual program of faculty development (Bergquist & Phillips, 1975). The range of faculty development activities are perceived to facilitate faculty members in enhancing professional skills imperative for effective execution of teaching, research, or administrative activities and also involve formal programs to develop the teaching ability, scholarship, and professionalism. Some of the activities include workshops, seminars, conferences, orientations, faculty exchange-programs, mentoring programs, leadership programs, sabbaticals, and directed publications. Enriching faculty members' vigor in key areas of instruction, evaluation, research, professionalism, and administration is perceived to progress learning environment notably and improve the academic performance of students. The various types of Faculty Training and Development Programs in India are as follows:

#### **i. UGC- Orientation Programme**

The orientation program is intended to inculcate the faculty with the awareness of linkages among society, environment education and development, Indian education system, education philosophy and pedagogy. It provides a background for enriching subject knowledge, personality development and management. It also sensitizes the faculty on information technology and computer awareness. This program is conducted by Academic Staff Colleges (ASCs) now known as Human Resource Development Centers (HRDCs), set up by the University Grants Commission in pursuance of the National Policy on Education 1986. All newly appointed faculty members in HEIs are expected to attend this program up to six years of continuous service, under the career advancement schemes. As per guideline laid by UGC, an orientation program conducted has a minimum of 144 contact hours, resulting in four-week program with 24 working days of six hours daily for the participants, making the course full time and residential.

#### **ii. UGC- Refresher Course**

The refresher course enables in-service faculty members to update the latest advancement and technologies in their respective subjects and also leanings from peers by knowledge exchange at a common platform. The duration of the program is for three weeks with a minimum of 18 working days and 108 contact hours with a requirement of six hours daily making the program full time and residential. Participation in orientation programme is a requirement to be selected for refresher course. A faculty may attend refresher course after a gap of one year following an orientation course and further a gap of one year between two refresher courses.

#### **iii. UGC- Short Term Course**

It is a workshop conducted for a period of two days to one week that provide hands on training on respective subject area, research methodology, MOOCs E-Content development, workshop for academic administrators, leadership development, and socially relevant topics.

#### **iv. UGC- Summer School Training/ Winter School Training**

It provides the faculty knowledge on general awareness and subject specific awareness. The program covers the area of Basic Science, Humanities, Social Science, and Arts. The duration of the training period is 21 days.

#### **v. Faculty Induction Program**

The Faculty Induction Program, a residential programme is one-month Programme carried out in two phases of 18 days and 12 days, respectively and conducted by the UGC-Human Resource Development Centers (HRDCs). The program is mandatory for all newly recruited faculty members within one year of their joining service. The Induction Program focuses on participant-centered, inclusive, outcome-based, active learning with apt use of technology. The pedagogy of the Induction Programme is based on an arrangement of peer-facilitated, expert-led, and self-learning method. The objective of the Induction Program is to make the faculty members understand their roles and responsibilities, to familiarize with the governance and professional expectations in higher education institutions. It also focuses on exploring the pedagogical processes.

#### vi. Faculty Development Programs

Faculty Development Programs focus on imparting knowledge and skills on teaching and research abilities by means of contemporary training methodologies. The duration of FDP is anywhere between 5 days to 6 months depending on the organizing HEIs.

#### vii. Skills Development Program

Skill Development Program training is a concept that focus to create scope and opportunities for the faculty members by developing their talent and enhancing the skills and know-how. The emphasis of skill training is to provide proper training that will support and guide the faculty members in their chosen field. The duration of Skills Development is anywhere between 3 days to 1 month depending on the organizing Institutions.

#### viii. Quality Improvement Programs

Quality Improvement programs enhance the quality of aspiring faculty by offering them higher degree programs (M. Tech, Ph.D), short-term courses or curriculum development activities for improving teaching and learning This program is usually sponsored by AICTE (All India Council for Technical Education) for upgrading expertise and capabilities of in-service faculty in degree level engineering institutions.

#### ix. Workshops

Workshops are usually organized by UGC-HRDCs or by the HEIs for their faculty members to enable them with a particular skill as specified in the theme of the workshop. It can be on various aspects of research methodology, teaching methodology, and use of ITC tools. Workshops provide hands on experience to the faculty where the techniques learnt can be used to enhance classroom teaching-learning and to enrich further research work.

#### x. Seminars/ Conferences/ Symposiums

Seminars/Conferences/Symposiums are organized by HEIs either solely or in collaboration with other HEIs. These programs are either self-sponsored by the organizing HEIs or fully sponsored by UGC and other funding agencies which are organized at a National or International level. It provides a platform to faculty members to present their research paper in front of the faculty and student audience. This provides a great opportunity for the faculty to present their innovations and research as well as experience an exchange of knowledge and ideas with the faculty community. The experience in terms of paper presentation or participation greatly enhances the faculty knowledge and skills and provides more insight in the field of research leading to professional development.

#### xi. Administrative training Programs

Administrative Training Programs are short-course training programs that enable faculty members to focus on educational administration-leadership and management skills. It is a method of cross-training organized by Institutions for the purpose of equipping faculty members to acquire skills needed for managing administrative functions to carry out added non-teaching duties. The training program objective is to prepare and develop the faculty members and equip them with the vital skills and methods to take up varied administrative responsibilities and functions of management in order to strive in their teaching career.

#### xii. Faculty Exchange Programs

Faculty exchange programs provide faculty with an opening to teach or undertake research for one semester or an academic year abroad. It provides the benefit of experience to a culturally different and diverse faculty composition, with a chance to exchange ideas and observe a diversity of styles. The ultimate goal of the exchange program is to develop an effervescent and diverse faculty. It provides a unique opportunity for interaction between the Foreign University and Indian Institutions in creating a greater bond between the concerned universities.

#### xiii. Faculty Extension Programs

Faculty Extension programs emphasizes on community service. The extension faculty has specific training and experience in academic discipline responsible for providing disciplinary expertise and educational curriculum for cooperative extension outreach. The Extension programs involve identifying community needs and collaborate with local organizations and individuals to address the issue through publications, educational conference, tours and other educational practice.

#### xiv. Faculty Retreats

Faculty retreats focuses on re-energizing faculty force and effort on a precise goal, which cut down and reduce the problem-solving process. It is an effective and bold way to address complex issues that occur in academic departments. The retreat provides an opportunity to step back from the daily work and engage in conversation about the values, purpose and meaning and connect with colleagues. The duration of the retreat may range from 1 day to 3 days.

#### xv. Leadership Development Programs

Leadership Development Programs focuses on developing academic leaders with skills to convert and manage result-oriented academic institutions. The program includes activities that improve the skills, abilities, improve productivity, and confidence of faculty members and promote better decision making for a positive working environment. It also aims to increase the faculty members' morale and retention and enhances the career opportunities on senior positions in Higher Education Institutions. Leadership Development Programs are also designed to facilitate continued growth of the faculty members and to accomplish specific leadership and institutional goals over the period of an academic year.

#### xvi. Certificate Courses

Certification program is a set of components of training programs offered by organizations and institutions to assist faculty members for professional development. The certificate provides evidence that the faculty member has attained a measured level of essential set of skills and knowledge with designated timeline.

## II. STATEMENT OF THE PROBLEM

The University Grants Commission, (1978) described that the primary responsibility of a faculty in Higher Education is to engage in teaching, research, and involve in community-based extension activities usually linked to one's discipline. The changing context and reforms of Higher Education pedagogy and development in Information Communication Technology (ICT) has led to the emerging requirements of updating and altering the roles of faculty members in Higher Education. Senge (1990) indicated the importance of all Higher Education Institutions to build up a status and reputation for excellence in teaching-learning process, regardless of the size, either public or private Institution. Faculty Training and Development programs entails engagement and

commitment of faculty members in their contextualized practice, which reflects innovative teaching-learning processes and result-based outcomes, associated with the standards laid down by the regulating bodies of Higher Education. According to Ansari & Malik (2013), “a teacher is a life-long learner because teaching itself is a lifelong process”. Faculty Training and Development programs provide faculty members the opportunity to develop and update their knowledge and skills on a particular subject or an area. Research also suggests that comprehensive faculty Training and Development program consequently provides necessary training for improved classroom performances, which assists the faculty member in developing a supportive environment within the Institution, and allows the faculty member to examine and reflect on personal values and attitudes, as professional development programs significantly influence a faculty member’s professional life. Generally, an individual enters into teaching profession either by choice or by chance, it has been experienced that the newly appointed faculty member gets onto teaching without any orientation and with no proper knowledge of research activity too, owing to which the newly appointed faculty member have no alternative left except to emulate the prevalent teaching-learning methods and procedure of existing faculty members (Hasan & Parvez, 2017). Badley & Habeshaw (1991) argued that traditionally faculty members in higher education were not provided with any sort of training on teaching-learning methods and that leaning was only as a result of teaching practice. Furthermore, during the entire duration in the teaching profession even if the faculty member assumes religious commitment to their teaching and discipline research according to their understanding capacity, knowledge, and skills, Higher Education experiences unprecedented developments in teaching-learning process which extensively necessitate and demand faculty members to move beyond what is being currently routine-practiced and indulge in greater engagement in professional development and hence the need for continuous Faculty Training and Development Programs.

### III. LITERATURE REVIEW

Ashford et al., (1989) identified that in any University, faculty training and development, and continuous professional development of a faculty member is considered as the most important factor for faculty motivation that ultimately leads to higher job satisfaction. Badley & Habeshaw (1991) argued that in Higher education, the traditional teachers never underwent any formal training and development programs and their learning was only out of the teaching practice or there was no learning at all. The study suggested that Higher Education Institutions need to organize faculty training and development activities to equip the faculty members with the pre-requisite skills and knowledge.

Thomas (1993) concluded that since teaching is a continuous lifetime process, and given that knowledge never remains static but keeps expanding, training of faculty members on just one instance in life is never adequate or sufficient. Therefore professional development of faculty members on a constant and continuous basis becomes essential to maintain the quality preparation and facilitate the faculty members to effectively execute their assigned responsibilities.

Wilkerson & Irby (1998) examined various areas of training and development needs for faculty members. The study identified professional development, instructional development, leadership development, and organizational development as the training need areas for faculty members. The study further suggested that a comprehensive faculty training and development program was the need of the hour in order to empower faculty members to do extremely well as educationalist and to generate energetic intellectual communities that values teaching and learning.

Grace & Khalsa (2003) conducted a study on Massachusetts Institute of Technology and identified that in universities though the management provides numerous opportunities and incentives like pension, medical assistance, pay packages, to motivate and enhance faculty performance, the study identified that the essential factor of motivation was faculty’s professional development through essential training and development activities.

Schmalenberg & Kramer (2008) in their study established that training and development showed significant positive association with faculty performance. They further concluded that proper training and professional development significantly reduced high turnover and minimized job stress among the universities’ employees.

Pearson & Thomas (2010) observed positive change in approaches to teaching through faculty development practices at Eastern Illinois University. The results demonstrated faculty training as an influential instrument in initiating and guiding faculty members to effectively perform their multiple roles.

Kayani et al., (2011) asserted on the significance of faculty training and development in educational process. The study further noted that organizing various forms of training and development programs like seminar, workshops, conferences, and lectures, in higher education was essential to expose faculty members to the contemporary trends and also develop and enhance managerial and administrative skills.

Andrew et al., (2013) reported that conducting formal mentoring programme for newly recruited faculty member is considered as an effective way developing the faculty members. The study also presented various conditions that add to successful mentoring, such identifying the right instructors for the conduct of training and development programs.

Sarkar et al., (2015) analyzed the attitude of college teachers towards faculty development programs, level of participation, level of transfer of learning, and difficulties faced by faculty members. The study identified that faculty members have positive attitude towards participation in training and development programs, and applied the skills obtained from the training programs which showed high level of improvement in students’ performance. However, the study also identified that the faculty members level of enthusiasm and emphasis on research skills were low. The role of a faculty as a student mentor were also found to be low due to lack of skills and faculty members perceived only teaching as the single most important skill for being a good teacher. The study concluded that faculty members may have an uneven sight of what they are expected to do as part of their role and therefore suggested the need for effective training and development focusing on all aspects of teaching profession.

Ahmed et al., (2016) analyzed the relationship between training and development as independent variable and faculty performance as a dependent variable. The result showed significant impact of training on performance of an individual faculty member. The study revealed that factors like good salary, compensation package, and extra-curricular factors tend to motivate to work which in turn resulted in considerable effect on faculty performance, leading to the overall performance of business schools performance. Thus the study recommended that organizations should invest and provide maximum priority in arranging maximum number of training programs.

The 12th Five-Year Plan 2012-17: Inclusive & Qualitative Expansion of Higher Education (2012) of the UGC document committed one full chapter for enhancing quality and excellence in higher education. The Introduction of the chapter presented that the toughest challenge of excellence was improving the quality of education mostly in non-elite universities and colleges. The report

asserted on the need to encourage research and teaching-learning in the context and needs of the society, its traditions of knowledge, and the challenge of effective fostering of Constitutional values as teachers form the base of teaching – learning transaction.

**Hasan & Parvez, (2017)** emphasized that in India, extremely less attention were given on pedagogical aspects of teaching and training to faculty members as the study identified that faculty member commenced on teaching without any orientation in teaching or research activity and thus ended up following the common practices and procedures of other faculty members. The study suggested the urgent requirement for effective training and development programs for faculty members.

**Annual Report ICT Academy (2019-2020)**, reported that internationalization of teaching was considered essential to develop India's competency in research and innovation activities as it would move up India's Institutional ranking and enhance excellence in teaching-learning. The report asserted on the importance of organizing training and development programs for faculty members to enhance their pedagogical and research skills.

**University Grants Commission (2019)** mandated development and implementation of Faculty Induction Programme for newly recruited faculty members in higher education institutions with the objective to help newly recruited faculty members to improve their teaching and organizing skills, to adapt to institutions culture, and to understand their professional role and responsibilities.

#### IV. OBJECTIVES OF THE STUDY

- To identify the existing types of Faculty Training and Development programs conducted/organized by HEIs of Nagaland.
- To identify the types of Training and Development programs attended by faculty of HEIs in Nagaland.

#### V. RESEARCH METHODOLOGY

The study focused on identifying the existing faculty training and development programs conducted/organized by HEIs in Nagaland and the types of training and development programs attended by faculty of HEIs in Nagaland; hence, a descriptive survey design was adopted for the study. The study was carried out in the area of Nagaland, comprising of 12 districts. All Higher Education Institutions located in each district was considered for the study. On the basis of each district, the break-up of HEIs in Nagaland is presented in table 1 and the sample frame of HEIs in Nagaland is presented in table 2.

**Table 1: District Wise Break-Up of Higher Education Institutions in Nagaland**

Sl. No	District	No. of Universities			No. of Colleges		Inst. of National Imp.	Total
		Central	Private	State	Govt.	Private		
1	Kohima	01	-	-	03	18	-	22
2	Dimapur	-	03	01	01	24	01	30
3	Wokha	-	-	-	01	01	-	02
4	Mokokchung	-	-	-	02	04	-	06
5	Tuensang	-	-	-	01	02	-	03
6	Zunheboto	-	-	-	01	-	-	01
7	Kiphire	-	-	-	01	-	-	01
8	Longleng	-	-	-	01	-	-	01
9	Peren	-	-	-	01	01	-	02
10	Phek	-	-	-	02	-	-	02
11	Mon	-	-	-	01	-	-	01
12	Noklak	-	-	-	-	-	-	-
<b>Total</b>		<b>01</b>	<b>03</b>	<b>01</b>	<b>15</b>	<b>50</b>	<b>01</b>	<b>71</b>

Source: Compiled from All India Survey for Higher Education (AISHE) (20017-2018); Annual Report Nagaland University (2017-2018); Annual Administrative Report Dept. of Higher Education (2017-2018)

**Table 2: Sample Frame of Higher Education Institutions in Nagaland**

Sl. No	Total No. of HEIs in Nagaland	Total No. of Institution Head's of HEIs in Nagaland	Total No. of Faculty of HEIs in Nagaland
1.	71	71	1,983

Source: Compiled from All India Survey for Higher Education (AISHE) Report 2017-2018; Annual Report Nagaland University (2017-2018).

Questionnaires were administered to all HEIs in Nagaland: 50 Private Colleges, 16 Government College, 03 Private Universities, 01 Institute of National Importance and 01 Central University. Purposive sampling method was employed to select respondents who had attended any sort of training and development programs and possess teaching experience of minimum three years and above. For the selection of Higher Education Institution Heads respondents, convenience sampling method was used. Out of 77 HEIs, 44 Institution Heads responded and a total of 396 faculty responses were found to be valid for analysis. The responses were recorded using dichotomous responses as Yes/No to identify the various types of faculty training and development programs conducted/organized by HEIs of Nagaland and the various training and development programs attended by faculty HEIs in Nagaland. Data obtained were analyzed using Statistical Package for Social Science (SPSS) version 20. Descriptive statistics was employed to find out the characteristics of the variables.

## VI. DATA ANALYSIS

## 1. DEMOGRAPHIC ANALYSIS OF THE RESPONDENTS:

## a) Higher Education Institutions Profile in Nagaland

Table 3: Gender of the Respondents (Institution Head's)

		Frequency	Percent
VALID	MALE	34	77.3
	FEMALE	10	22.7
	TOTAL	44	100.0

Source: Researcher's field survey Data.

The above table 3 represents the gender composition of the respondents. It is observed that 77.3% were male respondents and 22.7% are female respondents. Thus, the sample represents majority of male respondents as Heads of HEIs.

Table 4: Type of Higher Education Institution

		Frequency	Percent
VALID	GOVT.	14	31.8
	PRIVATE	30	68.2
	TOTAL	44	100.0

Source: Researchers field survey Data.

The above table 4 represents the type of Higher Education Institutions of the respondents. It is observed that 31.8% of the respondents were from Government Higher Education Institutions and 68.2% form Private Higher Education Institutions. Thus majority of the respondents were from private HEIs

Table 5: NAAC Accredited Higher Education Institutions

		Frequency	Percent
VALID	YES	21	47.7
	NO	23	52.3
	TOTAL	44	100.0

Source: Researchers field survey Data.

The above table 5 represents the status of NAAC Accreditation. It is observed that 47.7 % of Higher Education Institutions in Nagaland are NAAC accredited whereas 52.3% of the Higher Education Institutions are not.

Table 6: UGC Recognition under Clause (f) of Section 2 of the UGC Act

		Frequency	Percent
VALID	2f	4	9.1
	12B	25	56.8
	2f & 12B	15	34.1
	TOTAL	44	100.0

Source: Researcher's field survey Data.

The above table 6 represents the nature of UGC recognition. It is observed that 9.1% of the Higher Education Institutions falls under UGC sec 2f, 56.8% falls under UGC sec 12B and 34.1% falls under both UGC sec 2f & 12B. Thus, a majority of the Higher Education Institutions in Nagaland falls under UGC section 12B only.

## b) Faculty Profile Of Higher Education Institutions In Nagaland

Table 7: Gender of the Faculty Respondents

		Frequency	Percent
VALID	MALE	177	44.7
	FEMALE	219	55.3
	TOTAL	396	100.0

Source: Researchers field survey Data.

The above table 7 represents the gender composition of the respondents. It is observed that 44.7% represents male respondents and 55.3% female respondents. Thus, female respondents are slightly higher in number as compared to male respondents.

Table 8: Age of the Faculty Respondents

		Frequency	Percent
VALID	30 & Below	96	24.2
	Between 31-45	267	67.4
	Between 46-55	22	5.6
	56 & Above	11	2.8
	TOTAL	396	100.0

Source: Researchers field survey Data.

The above table 8 represents the age of the respondents. It is observed that majority of the respondents age group were between 31 years and 45 years with 67.4%, age group below 30 years represented 24.2%, age group between 44 years and 55 years represented 5.6% followed by age group 56 years and above with 2.8% of the total respondents.

**Table 9: Type of Higher Education Institution of the Faculty Respondents**

		Frequency	Percent
VALID	PRIVATE	271	68.4
	GOVT.	125	31.6
	TOTAL	396	100.0

Source: Researchers field survey Data.

The above table 9 represents the type of HEIs of the respondents. It is observed that respondents from Government Higher Education Institutions represented 31.6% and respondents from Private Higher Education Institutions represented 68.4% of the total sample.

**Table 10: Educational Qualification of the Faculty Respondents**

		Frequency	Percent
VALID	PG	167	42.2
	M.Phil	118	29.8
	PhD	111	28.0
	TOTAL	396	100.0

Source: Researchers field survey Data.

The above table 10 represents the educational qualification of the respondents. It is observed that 42.2 % of the respondents possessed PG (Post Graduation) degree, 29.8% possessed M. Phil (Masters in Philosophy) degree and 28% of the total respondents possessed Ph.D (Doctor of Philosophy) degree. Thus, it is observed that majority of the faculty possessed only the minimum qualification which is PG (Post Graduation).

**Table 11: Number of UGC-NET Qualified Faculty Respondents**

		Frequency	Percent
VALID	YES	238	60.1
	NO	158	39.9
	TOTAL	396	100.0

Source: Researchers field survey Data.

The above Table 5.9 represents the status of UGC-NET qualification. It is observed that 60.1% of the respondents were UGC-NET qualified and 39.9% did not possess UGC-NET qualification. Thus, it is observed that majority of the faculty respondents were UGC-NET qualified.

**Table 12: Designation of the Faculty Respondents**

		Frequency	Percent
VALID	PROFESSOR	12	3.0
	ASSOCIATEPROFESSOR	22	5.6
	ASSISTANT PROFESSOR	362	91.4
	TOTAL	396	100.0

Source: Researchers field survey Data

The above table 12 represents the designation of the respondents. It is observed that Assistant Professor represented 91.4%, Associate Professor represented 5.6% and Professor represented 3% of the total population. Thus, it is observed that a majority of the respondents held the designation of Assistant Professor.

**Table 13: Teaching Experience in Years**

		Frequency	Percent
VALID	3-5	172	43.4
	6-10	155	39.1
	11-15	54	13.6
	16-20	12	3.0
	21-25	3	0.8
	26-30	-	-
	30 & ABOVE	-	-
	TOTAL	396	100.0

Source: Researchers field survey Data.

The above table 13 represents the teaching experience of the respondents. It is observed that respondents with 3 years to 5 years of teaching experience represent 43.4%, 6 years to 10 years represent 39.1%, 11 years to 15 years represent 13.6%, and 16 years to 20 years represent 3.0% of the total sample. It is also observed that none of the respondents from the total sample had teaching experience of 26 years and above.

## 2. DESCRIPTIVE STATISTICS OF THE SAMPLE

## a) FACULTY TRAINING AND DEVELOPMENT PROGRAMS OF HIGHER EDUCATION INSTITUTIONS IN NAGALAND

Table 14: Training and Development Programs Conducted by Higher Education Institutions in Nagaland

Sl. No.	Indicator	Response	Sample	Valid Percent
FIP	Faculty Induction Program	Yes	13	29.5
		No	31	70.5
		Total	44	100.0
FDP	Faculty Development Programs (FDPs)	Yes	13	29.5
		No	31	70.5
		Total	44	100.0
SDP	Skill Development Programs	Yes	4	9.1
		No	40	90.9
		Total	44	100.0
QIP	Quality Improvement Programs	Yes	12	27.3
		No	32	72.7
		Total	44	100.0
WS	Workshops	Yes	44	100.0
		No	-	-
		Total	44	100.0
WSICT	Workshops on Information Communication & Technology (ICT)	Yes	25	56.8
		No	19	43.2
		Total	44	100.0
NSEM	National Seminars	Yes	43	97.7
		No	1	2.3
		Total	44	100.0
ISEM	International Seminars	Yes	7	15.9
		No	37	84.1
		Total	44	100.0
NCON	National Conferences	Yes	30	68.2
		No	14	31.8
		Total	44	100.0
ICON	International Conferences	Yes	3	6.8
		No	41	93.2
		Total	44	100.0
NSYM	National Symposiums	Yes	9	20.5
		No	35	79.5
		Total	44	100.0
ISYM	International Symposiums	Yes	3	6.8
		No	41	93.2
		Total	44	100.0
ATP	Administrative Training Programs	Yes	4	9.1
		No	40	90.9
		Total	44	100.0
OIBL	Online/Internet Based Learning	Yes	2	4.5
		No	42	95.5
		Total	44	100.0
FEP	Faculty Exchange Programs	Yes	5	11.4
		No	39	88.6
		Total	44	100.0
FR	Faculty Retreats	Yes	5	11.4
		No	39	88.6
		Total	44	100.0
LDP	Leadership Development Programs	Yes	13	29.5
		No	31	70.5
		Total	44	100.0
AOTP	Any Other Training Programs	Yes	0	0
		No	44	100.0
		Total	44	100.0

Source: Researchers own calculation from field survey using SPSS

The above table 14 represents the various types of faculty training and development programs conducted by HEIs in Nagaland. It is observed that 29.5% of HEIs in Nagaland conducts Faculty Induction Program, 29.5% organizes Faculty Development Programs, 9.1% conducts Skill Development Programs, 27.3% conducts Quality Improvement Programs, 100% organizes Workshops, 56.8% conducts Workshops on Information Communication & Technology (ICT), 97.7% organizes National Seminars, 15.9% organizes International Seminars, 68.2% organizes National Conferences, 6.8% organizes International Conferences, 20.5% organizes National Symposiums, 6.8% organizes International Symposiums, 9.1% holds Administrative Training Programs, 4.5% provides



Online/Internet Based Learning, 11.4% undertake Faculty Exchange Programs, 11.4% organizes Faculty Retreats and 29.5% conducts Leadership Development Programs.

## b) TYPES OF FACULTY TRAINING AND DEVELOPMENT PROGRAMS ATTENDED BY FACULTY OF HIGHER EDUCATION INSTITUTIONS IN NAGALAND

**Table 15: Training and Development Programs Attended By Faculty of Higher Education Institutions in Nagaland**

	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10
Valid	396	396	396	396	396	396	396	396	396	396
Mean	1.63	1.83	1.84	1.95	1.95	2.00	1.55	1.56	1.87	1.25
Median	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00
Std. Deviation	.484	.378	.371	.219	.209	.000	.498	.497	.333	.434

Source: Researchers own calculation from field survey using SPSS

**Table 16: Training and Development Activities Attended By Faculty of Higher Education Institutions in Nagaland**

	TA11	TA12	TA13	TA14	TA15	TA16	TA17	TA18	TA19	TA20
Valid	396	396	396	396	396	396	396	396	396	396
Mean	1.60	1.02	1.79	1.24	1.76	1.45	1.86	1.90	1.32	1.88
Median	2.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00
Std. Deviation	.490	.149	.408	.428	.429	.498	.351	.298	.468	.321

Source: Researchers own calculation from field survey using SPSS

**Table 17: Training and Development Activities Attended By Faculty of Higher Education Institutions in Nagaland**

	TA21	TA22	TA23	TA24	TA25	TA26	TA27	TA28	TA29	TA30
Valid	396	396	396	396	396	396	396	396	396	396
Mean	1.66	1.90	1.83	1.90	1.76	1.93	1.97	1.83	1.71	1.74
Median	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	2.00	2.00
Std. Deviation	.474	.305	.378	.295	.426	.252	.178	.375	.453	.441

Source: Researchers own calculation from field survey using SPSS

**Table 18: Training and Development Activities Attended By Faculty of Higher Education Institutions in Nagaland**

Sl. No.	Indicator	Response	Frequency	Valid Percent
TA1	I have attended UGC-Orientation Course.	Yes	148	37.4
		No	248	62.6
		Total	396	100.0
TA2	I have attended UGC- Refresher Course.	Yes	68	17.2
		No	328	82.8
		Total	396	100.0
TA3	I have attended UGC-Short –Term Courses.	Yes	65	16.4
		No	331	83.6
		Total	396	100.0
TA4	I have attended UGC- Summer School Training.	Yes	20	5.1
		No	376	94.9
		Total	396	100.0
TA5	I have attended UGC-Winter School Training.	Yes	18	4.5
		No	378	95.5
		Total	396	100.0
TA6	I have attended UGC-Faculty Induction Program.	Yes	0	0
		No	396	100.0
		Total	396	100.0
TA7	I have attended Faculty Development Programs (FDPs).	Yes	178	44.9
		No	218	55.1
		Total	396	100.0
TA8	I have attended Skill Development Programs.	Yes	175	44.2
		No	221	55.8
		Total	396	100.0
TA9	I have attended Quality Improvement Programs.	Yes	50	12.6
		No	346	87.4
		Total	396	100.0
TA10	I have attended Workshops.	Yes	297	75.0
		No	99	25.0
		Total	396	100.0
TA11	I have attended Workshops on Information Communication & Technology (ICT).	Yes	158	39.9
		No	238	60.1
		Total	396	100.0
TA12	I have attended National Seminars.	Yes	387	97.7
		No	9	2.3
		Total	396	100.0

TA13	I have attended International Seminars.	Yes	83	21.0
		No	313	79.0
		Total	396	100.0
TA14	I have attended National Conferences.	Yes	301	76.0
		No	95	24.0
		Total	396	100.0
TA15	I have attended International Conferences.	Yes	96	24.2
		No	300	75.8
		Total	396	100.0
TA16	I have attended National Symposiums.	Yes	218	55.1
		No	178	44.9
		Total	396	100.0
TA17	I have attended International Symposiums.	Yes	57	14.4
		No	339	85.6
		Total	396	100.0
TA18	I have attended Administrative Training Programs.	Yes	39	9.8
		No	357	90.2
		Total	396	100.0
TA19	I have presented papers in National Seminars.	Yes	268	67.7
		No	128	32.3
		Total	396	100.0
TA20	I have presented papers in International Seminars.	Yes	45	11.6
		No	350	88.4
		Total	396	100.0
TA21	I have presented papers in National Conferences.	Yes	134	33.8
		No	262	66.2
		Total	396	100.0
TA22	I have presented papers in International Conferences.	Yes	41	10.4
		No	355	89.6
		Total	396	100.0
TA23	I have presented papers in National Symposiums.	Yes	102	25.8
		No	294	74.2
		Total	396	100.0
TA24	I have presented papers in International Symposiums.	Yes	38	9.6
		No	358	90.4
		Total	396	100.0
TA25	I have completed Online/Internet Based Learning.	Yes	94	23.7
		No	302	76.3
		Total	396	100.0
TA26	I have participated in Faculty Exchange Programs.	Yes	27	6.8
		No	369	93.2
		Total	396	100.0
TA27	I have participated in Faculty Extension Programs.	Yes	13	3.3
		No	383	96.7
		Total	396	100.0
TA28	I have participated in Faculty Retreats.	Yes	67	16.9
		No	329	83.1
		Total	396	100.0
TA29	I have participated in Leadership Development Programs.	Yes	114	28.8
		No	282	71.2
		Total	396	100.0
TA30	I have completed Certificate Courses (Specific /Interdisciplinary subjects/Skill-based).	Yes	104	26.3
		No	292	73.7
		Total	396	100.0

Source: Researchers own calculation from field survey using SPSS

From the above table 18, it is observed that 37.4% of faculty respondents have attended UGC-Orientation Course, 17.2% attended UGC- Refresher Course, 16.4% attended UGC-Short –Term Courses, 5.1% attended UGC- Summer School Training, 4.5% attended UGC-Winter School Training, 0% attended UGC-Faculty Induction Program, 44.9% attended Faculty Development Programs (FDPs), 44.2% attended Skill Development Programs, 12.6% attended Quality Improvement Programs, 75% attended Workshops, 39.9% attended Workshop on Information Communication & Technology (ICT), 97.7% participated in National Seminars, 21% participated in International Seminars, 76% attended National Conferences, 24.2% attended International Conferences, 55.1% attended National Symposiums, 14.4% attended International Symposiums, 9.8% participated in Administrative Training Programs, 67.7% presented papers in National Seminars, 11.6% presented papers in International Seminars, 33.8 % presented papers in National Conferences, 10.4% presented papers in International Conferences, 25.8% presented papers in National Symposiums, 9.6% presented papers in International Symposiums, 23.7% completed Online/Internet Based Learning, 6.8% participated in Faculty Exchange Programs, 3.3% participated in Faculty Extension Programs, 16.9% participated in Faculty Retreats, 28.8% attended Leadership Development Programs and 26.3% completed Certificate Courses (Specific /Interdisciplinary subjects/Skill-based).

**VII. RESULTS AND DISCUSSIONS**

- **Finding related the types of Faculty Training and Development programs conducted/organized by HEIs in Nagaland.**

From the analysis it was observed that a majority of the HEIs in Nagaland have mostly conducted/organized Workshops, National Seminars, National Conferences, and Workshops on Information and Communication Technology (ICT). However, training and development programs such as Faculty Development Programs, Faculty Induction Programs, Leadership Development Programs, Quality Improvement Programs, National Symposiums, International Seminars, Faculty Exchange Programs, Faculty Retreats, Skill Development Programs, Administrative Training Programs, International Symposiums, International Conferences, and Online/Internet-Based Learning were conducted by very few of the HEIs in Nagaland. It was also observed that no other training and development programs were conducted apart from the training and development programs listed in the survey questionnaire. Training and Development programs like Faculty Development Programs, Faculty Induction Programs, Leadership Development Programs, Quality Improvement Programs, and Skill Development Programs are considered as very essential outcome-based training and development programs that focus on specific area of skill enhancement and increasing productivity of the faculty members. All these faculty training and development programs are the major training programs focused at a particular area of improvement with specific objectives that provide hands on learning experiences for the faculty participants to enhance their Skill. However, Seminars, Conferences, Symposiums are forms of academic instructions, where in assigned readings are discussed, questions in the concerned areas are raised by the audience and debates conducted to get better insight into the subject or related subtopics, to increase knowledge. HEIs in Nagaland need to lay emphasis on organizing various training and development programs directed towards enhancement of skills of a faculty member. Khan et al., (2011) asserted that, in the current scenario training and development programs is the most significant factor as training increases the competence and the value of employees and the organization. The main objective of faculty training and development programs is to enhance the skills, knowledge, and competencies of the faculty members, as a continuous activity and what learnings are obtained after undergoing the training and development program is the primary purpose of any faculty training and development. It is evident from the study that Higher Education Institutions in Nagaland organized and conducted training and development programs for the faculty member but the variety of faculty training and development programs undertaken were very minimal restricting to only workshops, seminars, and conferences. Training and Development programs need to be designed with specific goals and objectives while keeping in mind the specific skill needs of both the faculty member and the institution so that the services offered by the faculty members are immensely significant to the students. Thus, Higher Education Institutions in Nagaland need to provide due attention and consider conducting/organizing such training and development programs apart from organizing mostly seminars, conferences, and workshops.

- **Findings related to the Types of Training and Development Programs Attended by the Faculty of HEIs in Nagaland.**

From the analysis it was observed that a majority of the faculty members have attended Workshops, National Seminar, National Conferences, and National Symposiums. The faculty members' participation in the above training and development programs is no doubt as a result of the majority of the Higher Education Institutions in Nagaland having organized mostly Workshops, Seminars, and Conferences. Furthermore, it was identified that a majority of the faculty members have presented papers in National Seminars; however, participation as well as paper presentation is still low in International Seminars, Conferences, and Symposiums. The participation of faculty respondents in Faculty development Program, Skill Development Program, and Workshop on ICT were moderate. Participation in UGC-Orientation Course and UGC-Refresher Course were low, which may be as a result of Career Advancement Scheme followed only in Government Institutions and not a mandate for Private Institutions, thought some faculty members from private institutions do participate in UGC-organized faculty training and development programs through UGC-HRDC's. For training programs like Leadership Development, Skill Development, Online-based Learning, Certificate Course, Faculty Retreat, Faculty Exchange Programs, Quality Improvement Programs, UGC-Summer School, UGC-Winter School, and Short-Term courses, Faculty Extension Program, and Administrative Training programs, the participation of faculty respondents were extremely low. This is indeed an issue of concern that needs to be addressed immediately by the Higher Education Institutions in Nagaland. Faculty members' active participation in training programs and the learning obtained and disseminated is a crucial factor for attaining the objective of any Higher Education Institution. Thus, HEIs should render continuous support in organizing the necessary training and development programs and further motivate and encourage its faculty members to develop positive attitude towards training and actively participate in the required training and development programs.

**VIII. CONCLUSION**

Faculty Training and Development programs which are viewed as a method of "train the trainer" and as a stand-alone instructive pedagogy in fostering knowledge and developing professional skills of faculty member hold highest significance in the system of Higher Education as well as for Institution's progression. Faculty development constitutes a strategic level for ensuring quality and excellence in Institution's and an essentially imperative approach to forward institutional readiness to effectively respond to the growing complex demands faced by Higher Education Institutions. However, in the context of Higher Education Institutions in Nagaland since a majority of the faculty training and development programs conducted related with workshops, seminars, and conferences, and participation of the faculty members in the same it may not be sufficient enough to fill the gaps of training needs for a faculty member in the mentioned areas of development. Thus, apart from workshops, seminars, and conferences a variety of faculty training and development programs need to be organized encompassing all the essential areas of development within the Institution as training is said to be more effective if it is conducted where it is to be practiced and encourage faculty members for positive participation.

**REFERENCES**

- [1] Ahmed, R. R., Vveinhardt, J., Ahmad, N., and Sadiq, H. (2016) "The Impact of Working Conditions on Female Teachers' Performance In Private Universities Of Karachi", 10th International Technology, Education and Development Conference Proceedings of INTED2016 Conference, ISBN: 5543-5552:978-84-608-5617-7, Valencia, Spain
- [2] Andrew J. H., Patricia A., Angi M. and Peter D. T. (2013) "Mentoring beginning Teachers: What We Know and What We Don't. Teaching and Teacher Education.

- [3] Annual Report 2019-2020, Faculty Development Program (FDP), ICT Academy  
<https://www.ictacademy.in/imagesnew/annualreport2019-20.pdf> <https://www.ictacademy.in/pages/faculty-development.aspx>
- [4] Ansari, U., and Malik, S. K. (2013) "Image of an Effective Leader in 21st Century Classroom". *Journal of Educational and Instructional Studies in the World* Vol. 3, Issue 4, pp. 61-68.
- [5] Ashford, S.J., Lee, C., and Bobko, P. (1989). "Content, Cause, and Consequences of Job Insecurity: A Theory-Based Measure and Substantive Test. *Acad Manage journal*, Vol.32, pp.803–829.
- [6] Badley, G., and Habeshaw, T. (1991) "The Changing Role of Teachers in Higher Education" *British Journal of In-Service Education*, Vol. 7 (3), pp.212. <https://doi.10.1080/0305763910170307>
- [7] Bergquist, W. H., and Phillips, S. R. (1975) "A Handbook For Faculty Development". Shell Companies Foundation, New York
- [8] Bland, C., Schmitz, C., Stritter, F., Henry, R. and Aluise, J. (1990) "Successful Faculty in Academic Medicine", Springer-Verlag, New York.
- [9] Centra, J. A. (1978) "Types Of Faculty Development Programs". *Journal of Higher Education*, Vol. 49, Issue. 2, pp.151–162
- [10] Chalmers, R. K. (1992) "Faculty Development: The Nature And Benefits Of Mentoring". *Am J Pharm Educ*. Vol. 56, pp. 71-4.
- [11] Gaff, J. G. (1975) "Toward Faculty Renewal". San Francisco, CA: Jossey-Bass Inc.
- [12] Grace, D., and Khalsa, S. (2003) "Re-Recruiting Faculty and Staff: The Antidote to Today's High Attrition". *Independent School*, Vol. 62, pp. 20–27.
- [13] Hasan, M., and Parvez, M. (2017) "Professional Development of 21st Century Teachers in Higher Education" *International Journal of Education and Applied Social Science*, ISSN (Print)- 0976-7258, ISSN (Online)- 2230-7311, Vol. 8. pp. 145-149  
<https://DOI:10.5958/2230-7311.2017.00021.6>
- [14] James, E. (1990) "Decision Process and priorities in Higher Education". In S.A. Hoenack & E.L. Collins (Eds) *The Economics of American Universities: Management, Operations and Fiscal Environment*. pp. 77-106. Abany: State of University of New York Press.
- [15] Kabat, H. F., Hunter, T., Kroboth, P., Stennett, D.J., and White, S. J. (1989) "Report Of The Council Of Faculties Academic Affairs Faculty Development Committee". *Am J Pharm Educ*. Vol. 53:pp. 423-9.
- [16] Kayani, M. M., Morris, D., Azhar, M., and Kayani, A. (2011) "Analysis of Professional Competency Enhancement Programs NAHE on the Performance of College Teachers". *International Journal of Business and Social Sciences*. Vol. 2, Issue – 18, pp.169-175
- [17] Khan, M. M. and Sarwar M., (2011) "Needs Assessment of University Teachers for Professional Enhancement". *International Journal of Business and Management*, ISSN: 1833-3850 (Print), ISSN: 1833-8119 (Online), Vol. 6, Issue. 2, pp. 208-212  
<https://www.ccsenet.org.ijbm>
- [18] MacKinnon, G. E. III. (2003) "Administrator And Dean Perceptions Toward Faculty Development In Academic Pharmacy". *Am J Pharm Educ*. Vol. 67:Article 97
- [19] Madzik, P. and Hrnčiar, M. (2014) "Quality of Services with Respect to their Unique Characteristics – The Field of Education" Athens: ATINER'S Conference Paper Series, No: EDU2014-1003 .
- [20] Morant, R. W. (1981) "In-Service Education Within The School". London: George Allen & Unwin
- [21] Opoku-Asare, N. A. M. (2004) "Non-Book Instructional Media Usage In Ghanaian Primary School" *Journal of Science and Technology*, Vol. 24, Issue. 2.
- [22] Pearson, M. M. and Thomas, K. (2010) "Creating Quality Faculty Development Programs to Impact Teaching and Learning" *Faculty Research and Creative Activity*. 15.  
[https://thekeep.eiu.edu/eemedu\\_fac/15](https://thekeep.eiu.edu/eemedu_fac/15)
- [23] Riegler, R. P. (1987) "Conception of Faculty Development". *Education Theory*, Vol. 37, Issue. 1, pp. 53-61
- [24] Sarkar, A., Bharani, R., Ganger, S., and Balasubramanian, G. (2015) " Effectiveness of Faculty Development Programs in Developing Teachers For Higher Education" *Tactful Management Research Journal*, ISSN: 2319-7943, pp.125-135
- [25] Schmalenberg, C., and Kramer, M. (2008) "Essentials of a Productive Nurse Work Environment" *Nurses*, Vol. 57, pp. 2–13.  
<https://doi:10.1097/01.nnr.0000280657.04008.2a>.
- [26] Senge, P. M. (1990) "The Fifth Discipline: The Art and Practice of Learning Organization". New York: Doubleday-Currency
- [27] UGC (1978). "Policy Framework for Higher Education". New Delhi: University Grants Commission
- [28] University Grants Commission. Retrieved from <http://www.ugc.ac.in/page/genesis.aspx>
- [29] Whitcomb, M. (2003) "The Medical School's Faculty Is Its Most Important Asset". *Academic Medicine*, Vol. 78, Issue. 2, pp. 117–118.
- [30] Wilkerson, L., and Irby, D. M. (1998) "Strategies For Improving Teaching Practices: A Comprehensive Approach To Faculty Development". *Acad Med*. Vol. 73, pp. 387-96.
- [31] Winston, G. C. (1999) "Subsidies, Hierarchy, And Peers: The Awkward Economics Of Higher Education". *Journal of Economic Perspectives*, Vol. 13, Issue. 1, pp. 13–36.