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A STUDY ON PROFESSIONAL GROWTH OF TEACHERS IN HIGHER EDUCATION INSTITUTIONS OF ODISHA

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Abstract

The present study examined the professional growth of teachers working in higher education institutions in Odisha. The study aimed to assess the level of professional growth among teachers and compare it with respect to gender, qualification, experience, age, and stream of study. A quantitative research design with the survey method was adopted. The sample consisted of 150 teachers selected from ten autonomous colleges in Odisha through random and stratified random sampling techniques. A self-developed questionnaire was used to collect data on teachers' professional growth. The tool was validated by experts from universities and government colleges, and its reliability coefficient was found to be 0.84, indicating high reliability. The Shapiro–Wilk test revealed that the data were not normally distributed; therefore, frequency, percentage, and non-parametric tests such as Mann–Whitney U and Kruskal–Wallis were used for data analysis. The findings revealed that teachers showed a high level of professional growth through active participation in professional activities, academic contributions, institutional responsibilities, and innovative teaching practices. The study also revealed that professional growth did not differ significantly with respect to gender, but significant differences were found with respect to qualification, experience, age, and stream of study. The study implies that higher education institutions should provide equal and suitable opportunities for teachers' professional growth based on their professional needs to improve the quality of higher education.

Keywords: *Professional Growth, Higher Education Teachers, Professional Development, Teacher Competencies, Higher Education Institutions.*

Introduction:

The field of higher education is rapidly changing and becoming increasingly competitive; therefore, the professional growth of higher education teachers is essential for ensuring quality teaching and academic excellence. Professionalism reflects teachers' dedication, sincerity, and

commitment to academic responsibilities, while professional growth refers to continuous development through the acquisition of advanced knowledge, pedagogical skills, research competence, and digital literacy. In India, teacher education programmes are categorised into pre-service and in-service programmes, where pre-service prepares individuals for entry into the teaching profession and in-service focuses on the continuous development of teachers already in service. In-service programmes such as seminars, workshops, conferences, and faculty development programmes play a vital role in upgrading teachers' professional skills and competencies. Professional growth refers to the continuous development of teachers' skills, knowledge, and competencies through reflection, collaboration, and ongoing learning to improve teaching effectiveness and student outcomes (Kennedy, 2014; UNESCO, 2011). It involves activities such as professional development programmes, mentoring, collaboration, and reflective practice that enhance instructional approaches and support meaningful change in teaching (Guskey, 2003). Professional growth is a continuous learning process that enables individuals to acquire the knowledge, skills, and abilities needed to cope with changing demands for professional proficiency throughout their career (London & Mone, 1999). Buch (1991) explained that professional growth refers to the process through which teachers improve their professional competence, teaching effectiveness, and educational understanding through continuous learning.

In higher education, professional growth is essential for teachers to stay updated with new knowledge, pedagogy, and technology in an era of rapid advancement. Various agencies such as UGC, NAAC, AICTE, NCTE, SCERT, and NCERT provide opportunities through seminars, workshops, conferences, refresher courses, MOOCs, and other learning platforms. These initiatives help teachers improve their teaching strategies, integrate technology, engage in innovative practices, and enhance both personal and professional competencies, ultimately contributing to better student learning outcomes and quality education.

Models of Professional Growth

Professional growth of higher education teachers is a continuous and multidimensional process that improves their knowledge, skills, and teaching effectiveness. It is explained through several professional development models such as Wallace's Models of Professional Development (1991), which include the Craft Model, Applied Science Model, and Reflective Model; the Interconnected Model of Professional Growth by Clarke and Hollingsworth (2002); the Training Cycle in School (Exeter Model) by Bassett (2009); and the Spectrum of

Professional Growth Models by Kennedy (2014). These models together emphasize learning through experience, application of knowledge, reflection, collaboration, and structured training processes. Based on these theoretical foundations, the investigator developed a professional growth framework for higher education teachers comprising eight dimensions: educational qualifications, participation in orientation and refresher courses, participation in seminars and conferences, publication activities, research projects, institutional involvement, e-content development, and innovations and awards. This framework presents professional growth as a comprehensive and continuous process that enhances teaching effectiveness and supports institutional development, as presented in Figure 1.

Figure. 1: Dimensions of Professional Growth Framework (Kennedy,2014; Wallace, 1991; Clarke and Hollingsworth 2002; Bassett, 2009)

Rationale of the Study:

The quality of higher education largely depends on the professional growth and competencies of teachers, as they play a key role in teaching, research, and student development. Continuous professional growth helps higher education teachers enhance their teaching skills, research abilities, and use of digital tools, enabling them to adapt to changing educational needs and improve student learning outcomes. Since teachers are responsible for shaping future generations, their professional development directly contributes to national development. The effectiveness of the education system is strongly influenced by the extent to which higher education teachers engage in professional growth activities. Committed and professionally developed teachers are more likely to ensure quality education, whereas a lack of professional

growth may limit their effectiveness. Therefore, studying the professional growth of teachers in higher education institutions is essential to understand their development level and its contribution to improving the overall quality of education. NEP (2020) mandates comprehensive professional development for higher education teachers, focusing on continuous learning, pedagogical innovation, and digital adoption, including 50 hours of annual Continuous Professional Development (CPD), a shift towards multidisciplinary teaching, and the establishment of National Professional Standards for Teachers (NPST) to promote excellence, mentorship, and leadership. Similarly, UNESCO (2011) emphasizes continuous, lifelong professional development focusing on pedagogy, subject knowledge, and ICT integration through collaborative and practice-based programmes to enhance teaching quality and student outcomes.

In India, few research studies have been conducted on the professional growth of teachers in higher education. The research study also found that higher professional growth teachers have higher student achievement (Tulo & Lee, 2022). The study also revealed that higher-experience teachers have more professional growth as compared to less-experienced teachers (Nasim et al., 2023). The study revealed that there is no significant difference in the professional growth of teachers with respect to age in higher education institutions (Jamal et al., 2023). The study also found that arts stream teachers have higher professional growth; however, they have lower competencies compared to science stream teachers (Onyekwelu, 2024). Base (2025) revealed that there is a strong positive relationship between teachers' competencies and professional growth. The study found that professional activities shaped teachers' professional careers in teaching/research. The reviewed studies indicated that professional growth and continuous professional development (CPD) played an important role in improving teachers' teaching effectiveness, competencies, and student outcomes in higher education and school settings. Tindowen et al. (2020) found that most studies, such as Tahir et al. (2024) and Nasim et al. (2023), showed no significant differences in CPD perceptions based on gender or age, while experience and other variables showed some variation. Several studies, including Sabariah et al. (2025), Nyaaba & Zhai (2024), Srivastava et al. (2024), Ehtsham et al. (2024), and Arain (2020), reported a strong positive relationship between professional development and teaching performance or student achievement. However, Butt et al. (2021) and Padillo et al. (2021) reported no significant improvement or relationship in some CPD outcomes. Other studies such as Rafique et al. (2025), Teras (2016), and Shahzad et al. (2023)

showed mixed results, where CPD influenced attitudes and skills but varied across demographic factors.

Review of related literature found that few comprehensive studies have been conducted on professional growth of teachers working in higher education institutions of Odisha. Hence, study on professional growth of teachers at the higher education level is relevant. Hence, the investigator raises the following research questions for investigation.

Research Questions

1. What is the level of professional growth of teachers working in higher education institutions?
2. Is there any significant difference in the professional growth of teachers working in higher education institutions with respect to gender, qualification, experience, age, and stream of study?

Statement of the Problem:

The topic of the present study is entitled "A Study of Professional Growth of Teachers Working in Higher Education Institute of Odisha"

Objectives of the Study

1. To study the level of professional growth of teachers working in higher education institutions.
2. To compare the professional growth of teachers working in higher education institutions with respect to gender, qualification, experience, age, and stream of study.

Hypothesis of the Study

1. There is no significant difference in professional growth of teachers working in higher education institutions with reference to gender, qualification, experience, age and stream.

Delimitations of the Study

The study was delimited to 150 teachers of 10 autonomous colleges in the state of Odisha.

Research Methodology:

A quantitative research design and survey method were adopted in the present study. The investigator used the Random Sampling Method to select ten autonomous colleges and the Stratified Random Sampling Technique to select 150 teachers for the study. A self-developed close-ended questionnaire was used to assess the professional growth of teachers. After collecting responses from the faculty members, the investigator coded the responses using a

standard academic research scoring sheet. The tool was validated by experts from universities and government colleges, and its reliability coefficient was found to be 0.84, indicating high reliability. The Shapiro–Wilk test revealed that the data were not normally distributed; therefore, frequency, percentage, and non-parametric tests such as Mann–Whitney U and Kruskal–Wallis were used for data analysis.

Data Analysis and Interpretations:

In this section, the data were analysed and interpreted objective-wise. The investigator used descriptive analysis to study the level of professional growth of teachers, and inferential analysis was used to compare the professional growth of teachers working in higher education institutions with respect to gender, qualification, teaching experience, age, and stream of study. The results are presented and interpreted in the following paragraphs.

Objective–1*:* To study the level of professional growth of teachers working in higher education institutions.

Table 1: Descriptive Analysis of Professional Growth Indicators among Higher Education Teachers

Sl. No.	**Participation in Orientation, Refresher, and Short-Term Courses**	**Frequency**	**Percentage**
1	Participation in orientation programme	124	82.67
2	Participation in refresher course	127	84.67
3	Participation in short term courses	122	81.33
Sl. No.	**Presentation of Papers at Seminars and Conferences**	**Frequency**	**Percentage**
1	Presentation of a paper at international conferences/seminars	31	20.67
2	Presentation of a paper at national conferences/seminars	137	91.33
3	Presentation of a paper at state conferences/seminars	111	74
Sl. No.	**Participation in Seminars and Conferences**	**Frequency**	**Percentage**
1	Participation in international conferences/seminars	43	28.67
2	Participation in national conferences/seminars	114	76
3	Participation in state conferences/seminars	121	80.67
Sl. No	**Organization of Programmes**	**Frequency**	**Percentage**
1	Organized as coordinator/in-charge international level Programme	4	2.67
2	Organized as coordinator/in-charge National level Programme	40	26.67
3	Organized as coordinator/in-charge State /College level Programme	59	39.33

Sl. No.	**Publication of Papers**	**Frequency**	**Percentage**
1	Publication of Papers in Scopus index journal	23	15.33
2	Publication of Paper in UGC-listed journal	58	38.67
3	Publication of Paper in Peer-reviewed/ISSN journal	150	100
4	Publication of chapters/articles in ISBN number books	61	40.67
Sl. No.	**Information on Textbooks Authored**	**Frequency**	**Percentage**
1	Authored textbooks with international publishers and an ISBN	5	3.33
2	Authored textbooks with national publishers and an ISBN	21	14
Sl.No.	**Research Projects Undertaken**	**Frequency**	**Percentage**
1	Major Research Projects Completed	12	8
2	Minor Research Projects Completed	51	34
3	Major Research Projects ongoing	10	6.67
4	Minor Research Projects ongoing	21	14
Sl. No.	**Information on Countries Visited for Academic Purposes**	**Frequency**	**Percentage**
1	Country visited for academic work	11	7.33
Sl. No.	**Involvement in Institutional Activities**	**Frequency**	**Percentage**
1	Participation in other professional activities apart from teaching	150	100
2	Administrative position in College/ Department	123	82
3	Major contributions to Institution/Department	110	73.33
Sl. No.	**Development of E-Content**	**Frequency**	**Percentage**
1	E- Content developed in PPT Format	140	93.33
2	E- Content developed in Audio Format	7	4.67
3	E- Content developed in video Format	59	39.33
4	E- Content developed in live Format	7	4.67
Sl. No.	**Number of Citations Received for Published Papers**	**Frequency**	**Percentage**
1	The published paper citations	138	92
2	H-index citation	140	93.33
3	i10-index citation	57	38
Sl. No.	**Membership in Indexing Agencies**	**Frequency**	**Percentage**
1	Member of the indexing agency	144	96
Sl. No.	**Participation as a Resource Person**	**Frequency**	**Percentage**
1	Attended as resource person in international level Programme	6	4
2	Attended as resource person in National level Programme	36	24
3	Attended as resource person in State /College level Programme	70	46.67

Sl. No.	Innovation in Research, Teaching, and Assessment	Frequency	Percentage
1	Innovation in research	23	15.33
2	Innovation in teaching	135	90
3	Innovation in assessment	64	42.67
Sl. No.	**Awards Received**	**Frequency**	**Percentage**
1	International awards received	4	2.67
2	National awards received	7	4.67
3	State/College awards received	19	12.67
Sl. No.	**Community Enrichment Programmes**	**Frequency**	**Percentage**
1	Involvement in community enrichment programme	140	93.33
Sl. No.	**Participation in MOOC Courses**	**Frequency**	**Percentage**
1	Completed MOOC Courses for up to 12 Weeks	122	81.33
2	Completed MOOC Courses above 12-Week	110	73.33
3	Enrolled MOOC Courses for up to 12 Weeks	57	38
4	Enrolled MOOC Courses above 12-Week	26	17.33

The Table 1 revealed that teachers working in higher education institutions possessed a high level of professional growth across various academic and professional indicators. A majority of teachers participated in orientation programmes (82.67%), refresher courses (84.67%), and short-term courses (81.33%), reflecting active involvement in professional development activities. Most teachers presented papers at national (91.33%) and state-level (74%) seminars and conferences, while international presentations were comparatively low (20.67%). Participation in national (76%) and state-level (80.67%) seminars and conferences was also higher than at the international level (28.67%). All teachers (100%) published papers in peer-reviewed/ISSN journals, while a considerable number published in UGC-listed journals (38.67%) and Scopus-indexed journals (15.33%). Institutional involvement was notably high, with all teachers participating in professional activities apart from teaching, 82% holding administrative positions, and 73.33% making major contributions to their institutions. A large proportion of teachers developed e-content in PPT format (93.33%), were involved in community enrichment programmes (93.33%), held membership in indexing agencies (96%), and reported innovation in teaching practices (90%).

Therefore, it may be concluded that teachers working in higher education institutions possessed a high level of professional growth, marked by active professional engagement, academic contribution, institutional involvement, and innovative teaching practices.

Objective–2: To compare the professional growth of teachers working in higher education institutions with respect to gender, qualification, teaching experience, age, and stream of study.

Table 2: Inferential Analysis of Professional Growth of Teachers in Higher Education Institutions

Mann-Whitney Test for Comparing Professional Growth of Male and Female Teachers working in HEI						
Category	N	Mean Rank	Mann Whitney U	z-value	Sig.	Remarks
Male	90	78.14	2807	0.128	0.898	Not significant at 0.05 level
Female	60	79.1				
Kruskal-Wallis test for comparing Professional Growth of Teachers Working in HEIs with Respect to Qualification						
Category	N	Mean Rank	Kruskal-wallis	df	Sig.	Remarks
PG with NET	19	22.45	95.369	2	0.00	Not Significance at 0.05 level
M. Phil with NET	42	52.96				
Ph. D	89	108.29				
Kruskal-Wallis test for comparing Professional Growth of Teachers Working in HEIs with Respect to Experience						
Category	N	Mean Rank	Kruskal-wallis	df	Sig.	Remarks
Up to 10 Years	71	42.29	93.83	2	0.00	Significance at 0.05 level
11-20 Years	56	105.44				
21-above Years	23	125.89				
Kruskal-Wallis test for comparing Professional Growth of Teachers Working in HEIs with Respect to Age						
Category	N	Mean Rank	Kruskal-wallis	df	Sig.	Remarks
Up to 40 years	70	44.36	83.368	2	0.00	Significance at 0.05 level
41-50 years	56	103.59				
51 and above years	24	122.34				
Kruskal-Wallis test for comparing Professional Growth of Teachers Working in HEIs with Respect to Stream						
Category	N	Mean Rank	Kruskal-wallis	df	Sig.	Remarks
Arts	50	82.98	6.311	2	0.043	Significance at 0.05 level
Science	50	86.3				
Commerce	50	65.42				

The Table 2 revealed that there is no significant difference in professional growth with respect to gender (Sig. = 0.898 > 0.05), meaning male and female teachers have similar levels of professional growth. However, there is significant difference with respect to qualification, teaching experience, age, and stream of study (Sig. < 0.05). Teachers with a Ph.D. qualification,

higher teaching experience (21+ years), and higher age group (51+ years) show better professional growth. Among streams, Science teachers show the highest professional growth, followed by Arts and Commerce teachers.

Therefore, it is concluded that professional growth is not significant with respect to gender, but is significant with respect to qualification, experience, age, and stream of study.

Major Findings:

1. Teachers working in higher education institutions showed a high level of professional growth, reflected in their active involvement in professional activities, academic contributions, institutional responsibilities, and innovative teaching practices.
2. Professional growth was not significant with respect to gender, but it was significant with respect to qualification, experience, age, and stream of study.

Discussion of the Results:

The present study revealed that there is no significant difference in the professional growth of teachers working in higher education institutions with reference to gender at the 0.05 level. This result is supported by previous research studies (Srivastava et al., 2024; Kennedy, 2014; Onyekwelu, 2024). However, (Arain, 2020; Butt & Nadeem, 2021; Padillo, 2021) found that male teachers have more professional growth than female teachers, as women teachers face limited mentorship, societal expectations around caregiving, and challenges in balancing work and family, which hinder their professional growth, whereas men are more likely to be promoted to leadership roles, gaining access to better networking and career advancement opportunities. The present study found that there is a significant difference in the professional growth of teachers working in higher education institutions with reference to qualification at the 0.05 level, which is in accordance with the research studies conducted by (Tulo & Lee, 2022; Nasim et al., 2023; Jamal et al., 2023). However, (Onyekwelu, 2024; Base, 2025; Tindowen et al., 2020) found that teachers with Ph.D., PG with NET, and M.Phil. with NET qualifications experience similar levels of professional growth, as institutions provide similar support, resources, and opportunities for research and professional development, and all teachers are required to actively engage in research, publish, and attend conferences in line with higher education mandates. The present study also revealed a significant difference in professional growth with reference to experience at the 0.05 level, which is supported by (Sabariah et al., 2025; Nyaaba & Zhai, 2024; Srivastava et al., 2024). In contrast, (Ehtsham et al., 2024; Arain, 2020; Butt & Nadeem, 2021) revealed that teachers with less, average, and

more teaching experience have similar professional growth, as all are provided equal access and opportunities to participate in professional development activities within the institution. Further, the present study revealed a significant difference in professional growth with reference to age at the 0.05 level, which is supported by previous research studies (Padillo, 2021; Rafique, 2025; Teras, 2016). This is in contrast with the studies conducted by (Kennedy, 2014; Onyekwelu, 2024; Srivastava et al., 2024), who indicated that teachers of all age groups have a similar level of professional growth, as equal opportunities for professional development, resources, and training are provided to all, regardless of age. Finally, the present study revealed a significant difference in professional growth with reference to stream at the 0.05 level, and this result is supported by previous research studies (Teras, 2016; Butt & Nadeem, 2021; Srivastava et al., 2024). However, the findings were not supported by (Tindowen et al., 2020; Padillo, 2021; Base, 2025), who revealed that teachers of the science, arts, and commerce streams have a similar level of professional growth, as all are provided equal opportunities for professional development, access to training, and engagement in activities that promote teaching innovation and skill enhancement, regardless of their subject area.

Conclusion:

The present study found that teachers working in higher education institutions in Odisha showed a high level of professional growth through active participation in professional activities, academic work, institutional responsibilities, and innovative teaching practices. No significant difference was found in professional growth with respect to gender, while significant differences were observed with respect to qualification, experience, age, and stream of study. The findings indicate that professional growth among teachers is influenced by academic and professional factors. Therefore, higher education institutions should provide suitable opportunities and support for continuous professional development to strengthen teachers' competencies and improve the quality of higher education.

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