

Professional Development of Secondary School Teachers with Special Reference to the Kamrup District of Assam

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Abstract:- The development of a nation depends upon the quality of education which is again dependent on the quality of its teachers and for this reason, “the noblest profession is thought to be teaching, and teachers are viewed as the backbone of any country”. To enhance the effectiveness of teachers’ teaching methods, they must engage in professional development. Professional development is the most powerful and effective talent to raise the demands and achievements of the learners and then enable them to obtain these instruments to fulfil their learning requirements. It attempts to satisfy the needs of a teacher to adhere to efficient teaching methods. The present study was conducted to study the level of professional development of secondary school teachers in the Kamrup district of Assam, to compare the professional development of secondary school teachers in terms of gender i.e., Male and Female, and to compare the professional development of secondary school teachers in terms of their management i.e., Government and Private. Descriptive research method was used for conducting the current study. It was done in the Kamrup Metropolitan and Kamrup Rural districts of Assam. For collecting the required data, the researchers selected 100 secondary school teachers. For the present study, the researchers adopted a standardized scale “Teacher’s Professional Development Scale (TPDS) developed and standardized by Dr. Yodida Bhutia”. For analyzing the collected data, the Percentage method, Mean, Standard Deviation, and ‘t’ value were calculated.

Keywords: Professional development, Secondary school teachers, Teacher’s Professional Development Scale.

1. Introduction

An educational institution plays a significant role in providing learning opportunities that lead the students to move from the darkness of ignorance to the light of knowledge. It is a well-known truth that the quality and extent of learner accomplishment are mostly determined by the teacher's competency, attitude, sensitivity, and motivation. Therefore, the teacher must have adequate knowledge, abilities, interests, and attitudes towards the teaching profession.

In the context of education, the term "professional development" can be referred to a wide range of specialised training, formal education, or advanced professional learning aimed at assisting administrators, teachers, and other educators in enhancing their professional knowledge, competence, skill, and effectiveness. However, it could be challenging to understand precisely what "Professional development" means when the phrase is used in educational situations without qualifications, specific instances, or more explanation.

In the 21st century, The process of transformation and educational reform has been rapidly advancing in the globe as a whole. In the rapid process of educational reforms, teacher professional development has emerged as one of the crucial components. This is so because the teachers are the major agents of change and plan implementation

in educational reforms. Fullan (2001) also asserts that teachers have a crucial role in determining whether educational reform is successful or unsuccessful, and that for change to occur, teachers must be able to comprehend themselves and others.

As a dynamic, constantly evolving sector, professional development is crucial in the education sector. This indicates that teachers must continue to study throughout their careers in order to effectively teach and guide each new generation of students. The professional development of a teacher is the continuous professional growth of the teacher with increased expertise as a result of acquiring new knowledge, skills, competence and also acquiring new teaching methods, tips, tactics through a variety of experiences and programmes. Professional development encompasses both formal experiences such as attending workshops and professional meetings, mentorship, and so on, as well as informal experiences such as reading professional journals, watching television programs relevant to academic subjects, and so on. Ganser (2000) defined Teacher's professional development as a long-term process that provides basic training to the teacher and continues till, he/she takes retirement from the teaching profession thus it is a comprehensive process than just a profession. By considering all these points, we can say that professional development is the need of the hour.

Continuous Professional Development (CPD) keeps teachers current and equips them with the crucial information and abilities required to thrive in the teaching profession. Teachers may develop and reach their full potential on a personal and professional level through a process called continuous professional development, which is a form of lifelong learning. Through professional development, instructors must expand their topic knowledge and pick up new teaching techniques in order to fulfil the demands of the new standards. Attending a one-day in-service training session does not constitute continuous professional development. Instead, it is a process that occurs over the course of a lifetime. Additionally, it aids in the identification and resolution of issues related to teaching and learning, the integration of theory and practice, and the improvement of student performance. (Holmes, 2005).

The secondary school stage is very crucial in the line of the career of the students since it not only builds the foundation of their career but also determines their course of studies. The secondary school stage is the turning point in the whole educational process thus, teachers at this stage play a very significant role in the entire education process. It is very challenging and strenuous to work with secondary school pupils since at this stage, they are going through adolescence and massive transformation, which is characterised by "stress and strain, storm and strife," (Stanley Hall: 1904) and "identify vs role confusion" (Erickson). The teacher is the most significant player in determining how well students do, hence professional development for teachers is crucial for the overall improvement of the school. It gives educators the chance to improve their technological knowledge, instructional strategies, and how to deal with the learning difficulties of students. As a result, it improves the efficacy of the classroom. (King, 2019). However, a variety of elements, such as contextual, content, and process factors, have an impact on teacher professional development. Contextual factors include Organisational culture, educational culture, and the educational system. Content factors include new information and skills, experiences, and attitudes. Process factors involve Designing, implementing, and evaluating learning activities (Dachi, 2016; Postholm, 2018).

By addressing these elements of professional development, a teacher can advance himself or herself professionally. The researcher thought that it was important to learn more about how secondary school teachers were continuing their professional development while determining their levels of professional development.

2. Need of the study

Teacher professional development refers to teachers' learning and how they learn new knowledge and skills and apply what they have learned. It is a continual process of education, training, learning, and support activities designed to improve teachers' professional knowledge, competencies, attitudes, beliefs, and values (Avalos, 2011). Teacher professional development is also defined as formal and informal training activities that strengthen and improve professional knowledge and skills (Rao & Namamba, 2017; URT, 2017). Further Darling-Hammond, Hyler and Gardner (2017, p.2) define professional development as structured professional learning that results in a change to teacher's knowledge and practices and improvement in student learning outcomes. Thus, it involves the processes and activities of enhancing professional knowledge, skills, and attitudes of teachers in order to enable them improve students' learning. Teacher professional development is conceptualised in this study as

training and learning activities that allow teachers to engage constructively and responsibly in their career leading to the achievement of students and school objectives.

As a lifelong process that starts with preparation for the profession and lasts until death, teacher professional development is concerned with the professional and personal growth and development of teachers. This process is realised in a variety of ways, including the professional training of teachers with new knowledge, skills, and strategies in their respective fields of expertise as well as the use of appropriate technology (Jovanova-Mitskova, 2010). Not only for their own professional and personal growth, but also to enhance student learning, school improvement, and the general standard of the educational system, teachers must take part in professional development activities (Ozdemir, 2013). The only way to ensure high-quality teacher training is to use an effective paradigm. The main elements of a teacher training model that affect how well it performs are its planning, implementation, and management, as well as the assessment methods applied throughout the training (Zhu, 2013). Professional development must clear a number of significant transformational obstacles if it is to support teaching as a continuous investigation into more productive classroom practices (Fifield & Kedmior, 2004). The establishment of teacher connections, strengthening teamwork and cooperation in the classroom, local school, national, and wider, as well as the determination of goals (specific, realistic, and variable), and the tasks of teaching and learning have all been influenced by teacher professional development. This is important because it has a significant impact on teachers' beliefs and their practices and also affects student learning and the implementation of educational reform (Jovanova-Mitskova, 2010). In addition to the personal/individual satisfaction or financial gain that teachers may experience from participating in professional development opportunities. The teachers' work both in and out of the classroom have also been succeeded. Professional development experiences that are successful have a substantial influence on teachers' work both within and outside the classroom. According to a number of studies, the more professional knowledge teachers possess, the higher levels of student achievement they achieve in terms of the influence of professional development on student learning (NCFTE, 2009; NIE, Singapore 2009; Falk, 2001; Educational Testing Service, 1998; Grosso de Leon, 2001; McGinn and Borden, 1995).

Professional development of teachers has a significant positive impact on their attitudes and behaviours. It encourages the ability to adapt, take initiative, work with parents, know oneself, tune into oneself, practice personal integrity, be adaptable, keep high standards for oneself, and have a passion for information. Not every teacher has because different teachers have different levels of professional development, there are differences in the effectiveness of instruction and in students' ability to execute academic assignments. The range of professional development is influenced by a number of factors, which are many in the case of teachers. In this study, the researchers have analysed the influence of two background variables like Gender and the management of schools. The present study was done on the secondary school teachers as they play a prominent role in the entire education process. Dealing with secondary school students is a challenging and arduous task since in this period they experience adolescence with its "stress and strain, storm and strife." (Stanley Hall, 1904).

3. Review of related literature

Significant difference found in the dimensions of Knowledge, Competencies in Teaching, Commitment and Accountability, Leadership & Personal Effectiveness, Self-upgrading and Extended Reading and Overall professional development between Male and female teacher educators. Government and Government-aided teacher education institutions' teacher educators have better in all the dimensions and overall professional development than the private teacher education institutions' teacher educators (S.G. & Ksheerasagar, 2016).

A study was conducted on 60 secondary school teachers in Ulhasnagar and Kalyan area. It was found from the study that there is significant difference in the professional development of secondary school teachers on the basis of type of school (Aided and Unaided); there is no significant difference in the professional development of secondary school teachers on the basis of subject taught and there is significant difference in the professional development of secondary school teachers on the basis of qualifications (Jamdar, 2019).

Professional commitment refers to the strength of motivation to work in a chosen career role and to the attachment towards the profession. Significant difference found in the professional commitment of male and female

secondary school teachers. The female secondary school teachers were found to have professional commitment as compared to male secondary school teachers (Habib, 2019).

Professional development works like an action research, it identifies the weaknesses of teachers; while on the other hand, it works to get the reason and solution of this weakness in an effective way. It has made easy to recognise that how much a teacher is sane or which teacher has preferred teaching for. The teaching should be merged with professional development, for this it is very requisite to create such as working features, for instance, workshops, mentoring sessions, teachers' training which could identify the contemporary feebleness with solutions at the extent possibility (Qadir et al., 2020).

In an another study conducted in Shanghai, it was found that teachers have stronger professional development needs in a number of categories such as knowledge and understanding of subject fields, pedagogical competencies in teaching subject field, knowledge of curriculum, student evaluation, and assessment practice, ICT skills for teaching, school management and administration, approaches to individualised learning, teaching in a multicultural or multilingual setting, teaching cross-curricular skills, approaches to develop cross-occupational competencies for future work or future studies and student career guidance and counselling (Fang et al., 2021).

The perception of teachers on the contribution of professional development is not that much positive. They disagreed the fact that professional development has significant contribution in promoting their professional knowledge and skills. They do not even appreciate their participation in professional development activities (Abahumna & Dadi, 2019).

Teacher professional development is about the professional and personal growth of teacher, an ongoing process that starts from the beginning of preparation for the profession and continues until the end of life, a process that is realised in different ways, which involves training of teachers with new knowledge, skills, strategies in the respective areas of competence and application of appropriate technology (Jovanova-Mitskova, 2010; Cetin & Bayrakci, 2019).

Relevant literature indicates that professional development is an indispensable element in terms of teacher competence and quality, student learning and outcomes, school improvement and effectiveness and educational reform. Professional development plays an important role to improve teacher's professional and personal development and increase their career by helping them changing and reviewing their skills, knowledge, attitudes and understanding (Ozdemir, 2013). Teacher development can be recognised as a variety of activities which teachers participate in to improve their teaching skills. It mostly lays emphasis on teaching experience as well as interaction with other colleagues and reflecting (Miller de Arechaga, 2001 as cited in; Yuvayapan, 2013). It included both an intellectual and personal endeavor which requires not only engagement with new and differing ideas about education, trying out new activities and developing classroom practice, but also an emotional response as personal beliefs is challenged (Girvan, Conneely & Tangney, 2016, p.130).

Singh (1970) has conducted a study on whether teachers like their career, the result revealed that teachers have favourable attitude towards their profession. Anjaneya, S.R. (1970) conducted a study on job satisfaction of secondary school teachers and found that dissatisfaction varies with the type of institution they work. Rao (2012) conducted a study on attitude of secondary school teachers towards teaching profession and results revealed that there is no significant difference between teachers' attitude with relation to type of family and gender. H.V. Belagali (2009) studies teachers' attitude towards the teaching profession and found that female teachers have higher attitude towards the teaching profession as compared to their counterparts. Yara Philas Olatunde (2009) studied the relationship between teachers' attitude and students' academic achievement and found that a healthy attitude of teachers towards teaching promotes an effective teaching-learning process.

4. Objectives of the study

1. To study the level of professional development of secondary school teachers in the Kamrup district of Assam.
2. To compare the professional development of secondary school teachers in terms of gender i.e., Male and Female.

3. To compare the professional development of secondary school teachers in terms of their management i.e., Government and Private.

5. Hypotheses of the study

H₀₁: There is no significant difference between the professional development of male and female secondary school teachers.

H₀₂: There is no significant difference between the professional development of secondary school teachers in relation to their management i.e., Government and Private.

6. Delimitation of the study

The present study is delimited to the following-

i. The study was delimited to secondary school teachers who are working in government and private schools in the Kamrup Metropolitan and Kamrup Rural districts of Assam.

7. Research Methodology

A research problem can be explained and elucidated methodically using research methodology. It can be defined as the science of research techniques and procedures in research. The Descriptive research method was employed in the current study since it is most commonly used in educational studies to accurately and precisely describe a wide range of demographic characteristics. Through this research method, the current study is designed to gather precise information about the phenomenon as well as to make logical conclusions based on the data presented.

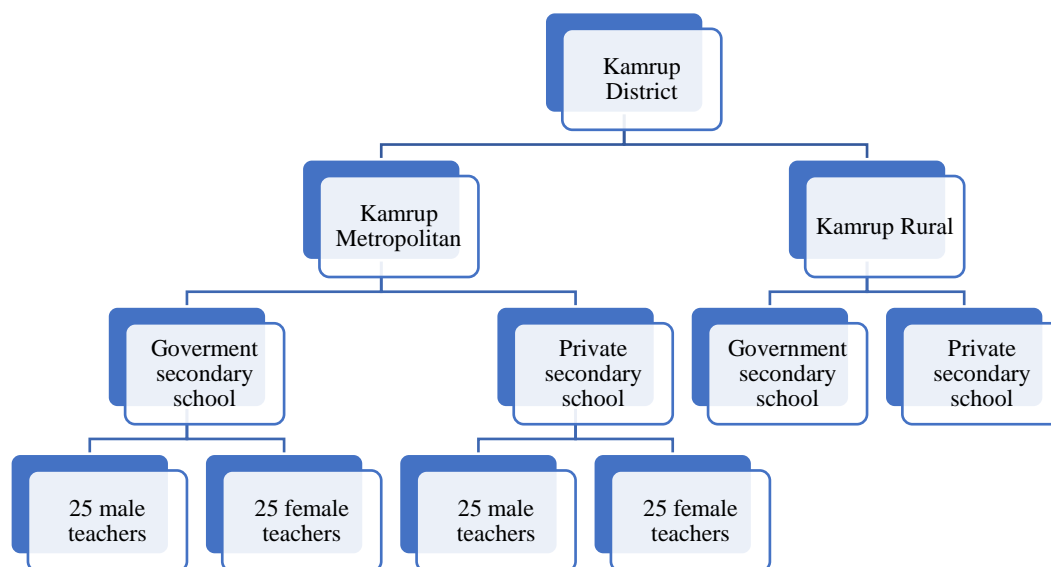
8. Population

The researcher considered all the secondary school teachers in the Kamrup Metropolitan and Kamrup Rural districts of Assam as the population of the present study.

9. Sample

In the Kamrup Metropolitan and Kamrup Rural districts of Assam, there are a number of secondary schools where more than 500 teachers are working. The researcher selected 100 secondary school teachers by using the Multistage sampling technique. Figure no. 1 depicts the required number of samples, i.e., 100 secondary school teachers by considering the Multistage sampling technique.

Figure 1:



10. Tool of the Study

For the present study, the researchers used the following tool-

- Teacher's Professional Development Scale (TPDS) developed and standardised by Dr. Yodida Bhutia.

11. Data collection

For collecting the required data, the researcher distributed the "Teacher's Professional Development Scale (TPDS)" to the selected sample i.e., 60 secondary school teachers in the Kamrup (Metro) district of Assam. Before collecting the data, the researcher informed about the purpose of the study and also gave the proper instructions to the selected sample.

After collecting the data, the researcher used appropriate statistical techniques to analyse the collected data.

12. Data Analysis and Interpretation

The data collected by the researcher for the present study are presented below-

Objective 1: To study the level of professional development of secondary school teachers in the Kamrup district of Assam.

Table 1: Level of professional development (Knowledge Dimension) of secondary school teachers in the Kamrup district of Assam.

No. of Secondary School Teachers	Percentage of secondary school teachers	Raw score	Z score range	Grade	Level of professional development
14	14%	44 to 49	+2.01 and above	A	Extremely high
23	23%	39 to 43	+1.26 to +2.00	B	High
43	43%	33 to 38	+0.51 to +1.25	C	Above average
20	20%	25 to 32	-0.50 to +0.50	D	Average/Moderate

In the Knowledge Dimension of professional development, 14% of secondary school teachers in the Kamrup district of Assam have **Extremely high(A)** level of professional development; 23% of secondary school teachers have **High(B)** level of professional development; 43% of secondary school teachers have **Above average(C)** level of professional development and 20% of secondary school teachers have **Average/Moderate(D)** level of professional development.

Graphical Representation 1 shows the Level of professional development (Knowledge Dimension) of secondary school teachers in the Kamrup district of Assam.

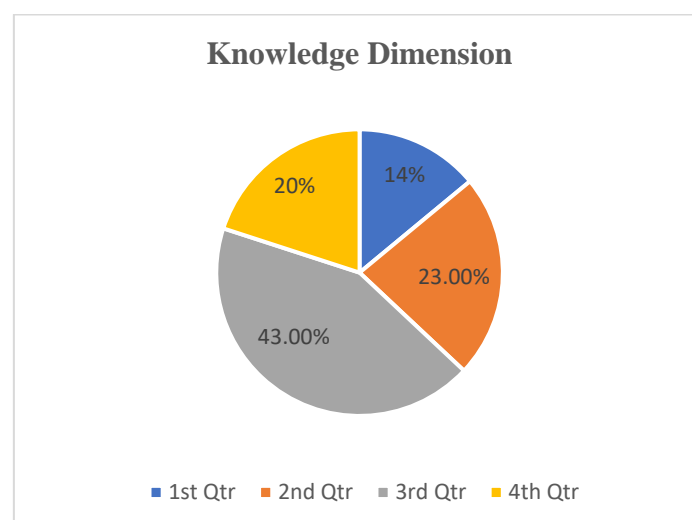
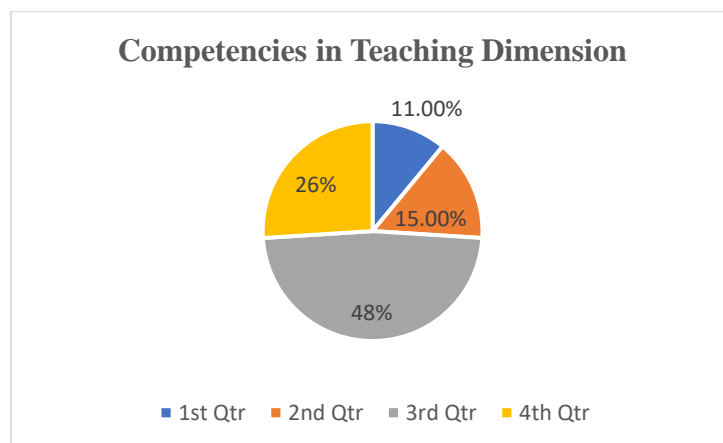


Table 2: Level of professional development (Competencies in Teaching) of secondary school teachers in the Kamrup district of Assam

No. of Secondary School Teachers	Percentage of secondary school teachers	Raw score	Z score range	Grade	Level of professional development
11	11%	39 to 47	+2.01 and above	A	Extremely high
15	15%	34 to 38	+1.26 to +2.00	B	High
48	48%	29 to 33	+0.51 to +1.25	C	Above average
26	26%	22 to 28	-0.50 to +0.50	D	Average/Moderate

In the Competencies in Teaching Dimension of professional Development, 11% of secondary school teachers have **Extremely high(A)** level of professional development; 15% of secondary school teachers have **High(B)** level of professional development, 48% of secondary school teachers have **Above average(C)** level of professional development and 26% of secondary school teachers have **Average/Moderate(D)** level of professional development.

Graphical Representation 2 shows the Level of professional development (Competencies in Teaching) of secondary school teachers in the Kamrup district of Assam

**Table 3: Level of professional development (Commitment and Accountability) of secondary school teachers in the Kamrup district of Assam**

No. of Secondary School Teachers	Percentage of secondary school teachers	Raw score	Z score range	Grade	Level of professional development
25	25%	35 to 39	+1.26 to +2.00	B	High
57	57%	30 to 34	+0.51 to +1.25	C	Above average
18	18%	23 to 29	-0.50 to +0.50	D	Average/Moderate

In the Commitment and Accountability Dimension of professional development, 25% of secondary school teachers have **High(B)** level of professional development; 57% of secondary school teachers have **Above average(C)** level of professional development and 18% of secondary school teachers have **Average/Moderate(D)** level of professional development.

Graphical Representation 3 shows the Level of professional development (Commitment and Accountability) of secondary school teachers in the Kamrup district of Assam

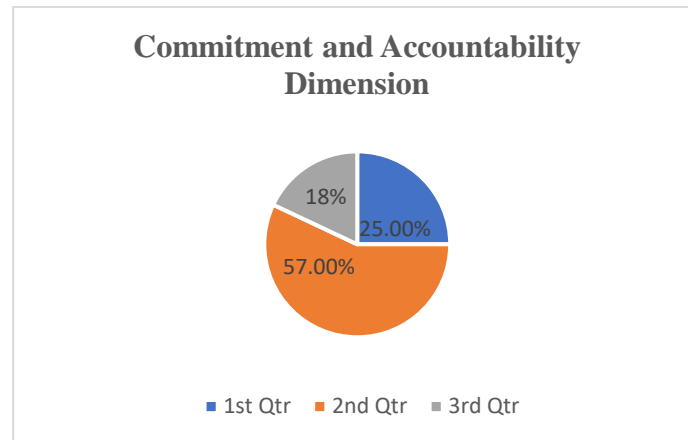


Table 4: Level of professional development (Leadership and Personal Effectiveness) of secondary school teachers in the Kamrup district of Assam

No. of Secondary School Teachers	Percentage of secondary school teachers	Raw score	Z score range	Grade	Level of professional development
23	23%	43 to 47	+1.26 to +2.00	B	High
47	47%	37 to 42	+0.51 to +1.25	C	Above average
18	18%	29 to 36	-0.50 to +0.50	D	Average/Moderate
12	12%	24 to 28	-0.51 to -1.25	E	Below

In the Leadership and Personal Effectiveness Dimension of professional development, 23% of secondary school teachers have **High(B)** level of professional development, 47% of secondary school teachers have **Above average(C)** level of professional development, 18% of secondary school teachers have **Average/Moderate(D)** level of professional development and 12% of secondary school teachers have **Below(E)** level of professional development.

Graphical Representation 4 shows the Level of professional development (Leadership and Personal Effectiveness) of secondary school teachers in the Kamrup district of Assam

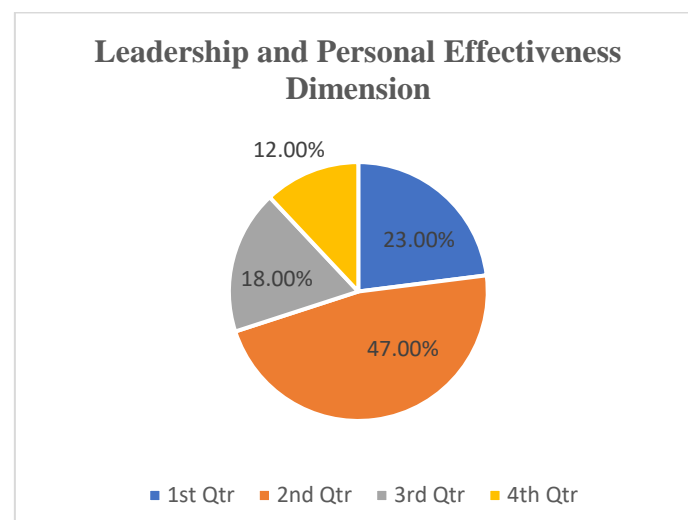
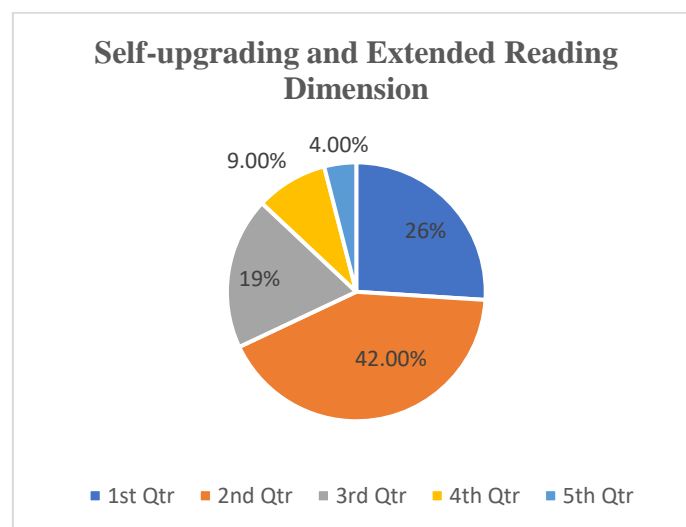


Table 5: Level of professional development (Self-upgrading and Extended Reading) of secondary school teachers in the Kamrup district of Assam

No. of Secondary School Teachers	Percentage of secondary school teachers	Raw score	Z score range	Grade	Level of professional development
26	26%	33 to 37	+1.26 to +2.00	B	High
42	42%	28 to 32	+0.51 to +1.25	C	Above average
19	19%	22 to 27	-0.50 to +0.50	D	Average/Moderate
9	9%	17 to 21	-0.51 to -1.25	E	Below
4	4%	12 to 16	-1.26 to -2.0	F	Low

In the Self-upgrading and Extended Reading Dimension of professional development, 26% of secondary school teachers have **High(B)** level of professional development, 42% of secondary school teachers have **Above average(C)** level of professional development, 19% of secondary school teachers have **Average/Moderate(D)** level of professional development, 9% of secondary school teachers have **Below(E)** level of professional development and 4% of secondary school teachers have **Low(F)** level of professional development.

Graphical Representation 5 shows the Level of professional development (Self-upgrading and Extended Reading) of secondary school teachers in the Kamrup district of Assam

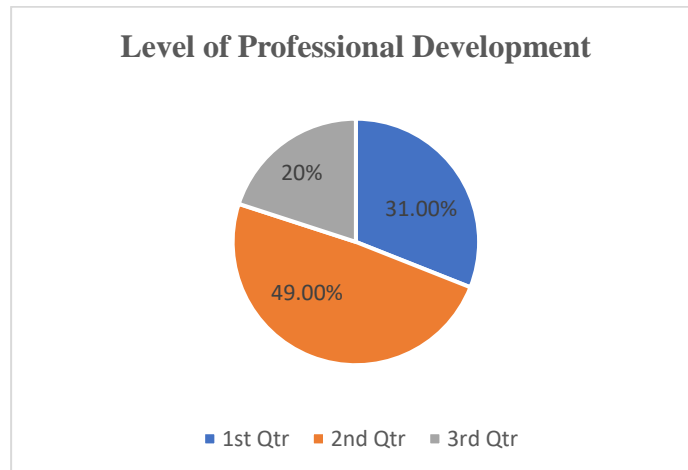
**Table 6: Level of professional development (Full Scale) of secondary school teachers in the Kamrup district of Assam**

No. of Secondary School Teachers	Percentage of secondary school teachers	Raw score	Z score range	Grade	Level of professional development
31	31%	182 to 207	+1.26 to +2.00	B	High
49	49%	156 to 181	+0.51 to +1.25	C	Above average
20	20%	120 to 155	-0.50 to +0.50	D	Average/Moderate

In conclusion, 31% of secondary school teachers fall under the category of **High(B)** level of professional development by securing the total score between 182 to 207, 49% of secondary school teachers fall under the

category of **Above average(C)** level of professional development by securing the total score between 156 to 181 and 20% of secondary school teachers fall under the category of **Average/Moderate(D)** level of professional development by securing the total score between 120 to 155.

Graphical Representation 6 shows the Level of professional development (Full Scale) of secondary school teachers in the Kamrup district of Assam



Objective 2: To compare the professional development of secondary school teachers in terms of gender i.e., Male and Female.

H₀₁: There is no significant difference between the professional development of male and female secondary school teachers.

Table 7: Comparison of the professional development of secondary school teachers in terms of gender i.e., Male and Female

Gender	No of secondary school teachers	Total score	Mean	SD	Calculated t value	remarks
Male	50	9055	181.1	16.39	4.68	Significant at 0.05 level and 0.01 level
Female	50	8134	162.68	22.51		

The calculated 't' value i.e., 4.68 is higher than the table value both at the 0.05 level of significance and 0.01 level of significance. Hence, the null hypothesis is rejected at both the levels of significance. Therefore, it is concluded that there is a significant difference between the professional development of male and female secondary school teachers. Thus, the result reveals that the mean score of the professional development of Male secondary school teachers (181.1) is higher than the mean score of the professional development of Female secondary school teachers (162.68).

Objective 3: To compare the professional development of secondary school teachers in terms of their management i.e., Government and Private.

H₀₂: There is no significant difference between the professional development of secondary school teachers in relation to their management i.e., Government and Private.

Table 8: Comparison of the professional development of secondary school teachers in terms of their management i.e., Government and Private

Management	No of secondary school teachers	Total score	Mean	SD	Calculated t value	remarks

Private	50	9222	184.44	16.31	5.41	Significant at 0.05 level and 0.01 level
Government	50	8138	162.76	23.17		

The calculated 't' value i.e., 5.41 is higher than the table value both at the 0.05 level of significance and 0.01 level of significance. Hence, the null hypothesis is rejected at both the levels of significance. Therefore, it is concluded that there is a significant difference between the professional development of secondary school teachers in terms of their management i.e., Government and Private. Thus, the result reveals that the mean score of the Professional development of Private secondary school teachers (184.44) is higher than the mean score of the professional development of Government secondary school teachers (162.76).

13. Findings of the study

The major findings of the present study are discussed below-

1. In the Knowledge Dimension of professional development, the majority (43%) of the secondary school teachers secured **C** grade which comes under the **Above average** level of professional development.
2. In the Competencies in Teaching Dimension of professional development, the majority (48%) of the secondary school teachers secured **C** grade which comes under the **Above average** level of professional development.
3. In the Commitment and Accountability Dimension of professional development, the majority (57%) of the secondary school teachers secured **C** grade which comes under the **Above average** level of professional development.
4. In the Leadership and Personal Effectiveness Dimension of professional development, the majority (47%) of the secondary school teachers secured **C** grade which comes under the **Above average** level of professional development.
5. In the Self-upgrading and Extended Reading Dimension of professional development, the majority (42%) of the secondary school teachers secured **C** grade which comes under the **Above average** level of professional development.
6. The level of Professional Development (Full scale) of secondary school teachers is **Above average** since a majority (49%) of the secondary school teachers scored between 156 to 181. As a result, they secured **C** grade in the Level of Professional Development.
7. The result reveals that the mean score of the professional development of Male secondary school teachers (181.1) is higher than the mean score of the professional development of Female secondary school teachers (162.68). Therefore, the researchers **failed to accept** the stated Null hypothesis i.e., there is no significant difference between the professional development of male and female secondary school teachers.
8. The result reveals that the mean score of the professional development of Private secondary school teachers (184.44) is higher than the mean score of the professional development of Government secondary school teachers (162.76). Therefore, the researchers **failed to accept** the stated Null hypothesis viz, there is no significant difference between the professional development of secondary school teachers in terms of their management i.e., Government and Private.

14. Conclusion

A teacher needs to update himself/herself professionally and personally in order to perform his/her diverse tasks and responsibilities and to become an asset to the nation. Teacher is considered as the main agent of social change. He is the person who can change the future of a student. In this respect, we require teachers who are contented with their work, motivated and committed to their profession.

Professional development of teachers is considered as one of the essential components for improving and reforming the quality of education in the recent years. There are five components of professional development viz knowledge, competencies in teaching, commitment and accountability of teacher educators, leadership & personal effectiveness, Self-upgrading & extended reading (TPDS by Bhutia). The present study aimed to determine the Level of professional development of secondary school teachers in these five components. As a result of the

analysis undertaken to achieve this goal, the level of professional development of secondary school teachers in the Kamrup district of Assam was found "Above Average". The researchers found that the factors like sex (Male and Female) and types of management (Government and Private) affect the level of professional development of secondary school teachers. The study was done in alignment with the various research studies because it is gaining popularity nowadays among the research community. So that once the present situation has been thoroughly researched and studied, we can adopt the necessary steps to improve the level of professional development of secondary school teachers in the Kamrup district so as to improve the overall education system in the district as well as in the state.

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