

A STUDY OF PROFESSIONAL DEVELOPMENT PRACTICES IN THE ELEMENTARY SCHOOLS OF VADODARA CITY

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CERTIFICATE

This is to certify that **Ms. HIMANI AJITSINH TANK** has conducted her dissertation work entitled “A STUDY OF PROFESSIONAL DEVELOPMENT PRACTICES IN THE ELEMENTARY SCHOOLS OF VADODARA CITY” under my guidance and supervision for the partial fulfilment of the degree of Master of Education (M.Ed.) at Centre of Advanced Study in Education (CASE), Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara. To the best of my knowledge, this dissertation is her genuine and original work. I find it satisfactory and fit for submission and evaluation.

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DECLARATION

I Himani Ajitsinh Tank , hereby declare that the dissertation entitled “A STUDY OF PROFESSIONAL DEVELOPMENT PRACTICES IN THE ELEMENTARY SCHOOLS OF VADODARA CITY” conducted and submitted by me for the partial fulfilment of the M.Ed. programme at The Department of Education, Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara, is my original work and has not been submitted earlier either to The Maharaja Sayajirao University of Baroda or to any other institution for any course requirement. I also declare that no chapter of this dissertation in whole or in part is taken from any earlier work done either by me or any other person.

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TABLE OF CONTENT

CAPTION /SUB- CAPTION NO.	TITLE	PAGE NO.
	CERTIFICATE	
	DECLARATION	
	ACKNOWLEDGEMENT	

1	CHAPTER 1: CONCEPTUAL FRAMEWORK	
1.0	INTRODUCTION	1
1.1	POLICY PERSPECTIVES	1
1.1.1	National Policy on Education (1986)	1
1.1.2	NCF 2005	2
1.1.3	National Curriculum Framework(2009)	2
1.1.4	National Education Policy 2020	2
1.2	MEANING OF PROFESSIONAL DEVELOPMENT	3
1.3	CHARACTERISTICS OF TEACHER PROFESSIONAL DEVELOPMENT	4
1.4	NEED AND IMPORTANCE OF PROFESSIONAL DEVELOPMENT	5
1.5	Importance of Professional Development for Teachers	6
1.5.1	Better Learning Outcomes for Students	6
1.5.2	Teachers Find New Ways to Teach	6
1.5.3	Teachers Develop Better Skills in Organizing and Management	6
1.5.4	Teachers Gain Knowledge and Insight into Industry	6
1.5.5	Teachers Want to Pursue Their Education	7
1.5.6	Why Should Teachers Set Professional Goals?	7
1.5.7	List of Professional Goals for Teachers	7
1.6	THE MODELS OF HIGH QUALITY TEACHER PROFESSIONAL DEVELOPMENT	8
1.6.1	Mentoring	8
1.6.2	Content Based Collaborative Inquiry (CBCI) & Cognitively Guided Instruction (CGI)	8
1.6.3	Lesson study	8
1.7	PRESENT SCENARIO OF TEACHER PROFESSIONAL DEVELOPMENT	8
1.8	RATIONALE OF THE STUDY	9
1.9	RESEARCH QUESTIONS	9
1.10	STATEMENT OF THE PROBLEM	9

1.11	OBJECTIVES OF THE STUDY	9
1.12	EXPLANATIONS OF THE TERM	10
1.13	DELIMITATIONS OF THE STUDY	10

2	CHAPTER:2 REVIEW OF RELATED LITERATURE	
2.0	INTRODUCTION	11
2.1	STUDIES REVIEWED	11
2.2	IMPLICATIONS OF THE REVIEW OF RELATED LITERATURE	14

3	CHAPTER 3: RESEARCH METHODOLOGY	
3.0	INTRODUCTION	16
3.1	METHODOLOGY OF THE STUDY	16
3.2	POPULATION OF THE STUDY	16
3.3	SAMPLE OF THE STUDY	16
3.4	DESCRIPTION OF TOOLS	16
3.5	PROCEDURE OF DATA COLLECTION	17
3.6	ANALYSIS OF DATA	17

4	CHAPTER 4: DATA ANALYSIS AND INTERPRETATION	
4.0	INTRODUCTION	18
4.1	OBJECTIVE WISE DATA ANALYSIS AND INTERPRETATION	18

5	CHAPTER 5 : SUMMARY, FINDINGS AND CONCLUSION	
5.1	INTRODUCTION	30
5.2	POLICY PERSPECTIVES	30
5.3	MEANING OF PROFESSIONAL DEVELOPMENT	32
5.4	CHARACTERISTICS OF TEACHER PROFESSIONAL DEVELOPMENT	32
5.5	NEED AND IMPORTANCE OF PROFESSIONAL DEVELOPMENT	33
5.6	Importance of Professional Development for Teachers	33
5.7	THE MODELS OF HIGH QUALITY TEACHER PROFESSIONAL DEVELOPMENT	34
5.8	PRESENT SCENARIO OF TEACHER PROFESSIONAL DEVELOPMENT	34
5.9	RATIONALE OF THE STUDY	35
5.10	RESEARCH QUESTIONS	35
5.11	STATEMENT OF THE PROBLEM	35
5.12	OBJECTIVES OF THE STUDY	35

5.13	EXPLANATIONS OF THE TERM	36
5.14	DELIMITATIONS OF THE STUDY	36
5.15	IMPLICATIONS OF THE REVIEW OF RELATED LITERATURE	36
5.16	METHODOLOGY OF THE STUDY	37
5.16.1	POPULATION OF THE STUDY	37
5.16.2	SAMPLE OF THE STUDY	37
5.16.3	DESCRIPTION OF TOOLS	38
5.16.4	PROCEDURE OF DATA COLLECTION	38
5.16.5	ANALYSIS OF DATA	38
5.17	MAJOR FINDINGS OF THE PRESENT STUDY	39
5.17.1	FINDINGS FROM OBJECTIVE: 1	39
5.17.2	FINDINGS FROM OBJECTIVE: 2	39
5.18	IMPLICATIONS OF FINDINGS	40
5.19	SUGGESTION FOR FURTHER RESEARCH	40
5.20	CONCLUSION	40

	REFERENCES	
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	APPENDIX 1 QUESTIONNAIRE	
	APPENDIX 2 TRANSLATED QUESTIONS IN GUJARATI	

LIST OF TABLES

TABLE 4.1 TO TABLE 4.48	ANALYSED DATA BY USING FREQUENCY AND PERCENTAGE	
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CHAPTER 1

CONCEPTUAL FRAMEWORK

1.0 INTRODUCTION

Elementary education is very beneficial not only to children, but also the nation at large. It is the foundation of advanced learning. It shapes the lives of people even into adulthood by promoting wise decision making. Children who obtain this education develop many skills such as sharing, turn taking, communication, as well as math skills. They also rapidly develop socially and emotionally as compared to those who never got this basic education. In addition, when a population is educated, the nation does not suffer many losses due to illiteracy of its people who are able to bring about economic development both at the grass root levels and nationality.

Teachers play an important role in the complex process of school development and growth, teachers are main change agents for bringing initiatives and innovations in the classroom practices as well as in school development. Hillman and Stoll (1994) define school development and growth as “ a systematic, sustained effort aimed at change in learning conditions and other related internal condition in one or more schools, with the ultimate aim at accomplishing educational goals more effectively.”

Therefore it is necessary to increase teacher’s effectiveness in elementary schools. So their professional development is very important.

1.1 POLICY PERSPECTIVES

Many policy documents have flagged the importance of investing in teacher development.

1.1.1 In National Policy on Education (1986), the following recommendations are made for the improvement of teacher’s professional competency and their service conditions:

1. The methods of recruitment of teachers will be reorganized to ensure merit, objectivity and conformity with spatial and functional recruitment.
2. The pay and service conditions of teachers have to be improved to commensurate with their social and professional responsibilities.
3. Teacher's associations must play a significant role in upholding professional integrity, enhancing the dignity of the teacher and curbing professional misconduct. National level associations of teachers could prepare a code of professional Ethics for Teachers and see its observance.

1.1.2 NCF 2005

Re-orientation of Teachers

Research in all aspects of children's education was NCERT's primary mandate. The modernization of teacher training was its other given. Teachers should see the child's talk as a resource rather than as a nuisance, the vicious cycle of resistance and control would have a chance to be turned into a cycle of expression and response. Opportunities for individualized reading need to be built at all stages in order to promote a culture of reading, and teachers must set the example of being members of such a culture. Just as the prematurely imposed discipline of pronunciation stifles the child's motivation to talk freely, in her own dialect, for instance, the demand for writing in mechanically correct ways blocks the urge to use writing to express or to convey one's ideas.

Teacher training had remained moribund and commercialization is the only change it is going through. Orissa is the first state that has made provision for up linking with EDUSAT for teleconferencing, ICT, and bringing technology in the classroom. Starting with four schools in Koraput, sitting in their classrooms, students and teachers can access satellite education facilities like curriculum based teaching and training for teachers. Teacher education has to be on going and on site.

Master Trainers

Keeping teacher training as high priority for the advocacy of NCF 2005, NCERT started conducting 3 day training programmes in NCF for Master Trainers who were senior teachers of Central School, Jawahar Navodaya Vidyalayas and other prominent schools in the country. Teachers were exposed to the new inputs and curricular changes and how to go about handling the new textbooks. Besides face to face interaction we also screened CDs - video and audio, to highlight the issues.

1.1.3 Then National Curriculum Framework for Teacher Education(2009) also talk about in-service education and continuous professional development. A series of professional orientation/ training programmes will need to be organized across the State of country to expound the contours of Learner Studies, Contemporary Studies, Educational Studies, Curriculum and Pedagogic Studies which inform the structures of the Framework.

1.1.4 National Education Policy 2020

Continuous professional development: Teachers must be given constant opportunities for self-improvement and to learn the latest innovations and advances in their profession. To ensure that every teacher has the flexibility to optimise their own development as teachers, a modular approach to CPD will be adopted. Developmental opportunities, in the form of local, State, national, and international teaching and subject workshops, as well as online teacher development modules, will be available to all teachers so that each teacher may choose what is most useful for their own development. Platforms (especially online platforms) will be

developed so that teachers may share ideas and best practices. Each teacher may be expected to participate in, say, 50 hours of CPD opportunities every year for their own professional development.

Leaders such as school principals and school complex leaders will be have similar modular leadership / management workshops and online development opportunities and platforms to continuously improve their own leadership and management skills, and so that they too may share best practices with each other. Such leaders would also be expected to participate in 50 total hours of CPD modules per year, covering leadership and management, as well as content and pedagogy for the teaching aspects of their jobs.

1.2 MEANING OF PROFESSIONAL DEVELOPMENT

The term “professional development” is defined by the National Staff Development Council (NSDC) to mean “a comprehensive, sustained and intensive approach to improving teacher's and principle's effectiveness in raising student achievement and may be supported by activities such as courses, workshops, institutes , networks and conferences”. The NSDC further reports that effective professional development is essential to school reform.

Teacher professional development is any type of continuing education effort for educators. It's one way teachers can improve their skills and in turn, boost student outcomes. Learning can take place in formal or informal settings. Formal settings include conferences, courses, seminars, retreats and workshops.

Professional development is defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher. In this last case, development can be provided through coaching/mentoring, collaborative planning and teaching and the sharing of good practices.

In education, the term **professional development** may be used in reference to a wide variety of specialized training, formal education, or advanced professional learning intended to help administrators, teachers, and other educators improve their professional knowledge, competence, skill, and effectiveness. When the term is used in education contexts without qualification, specific examples, or additional explanation, however, it may be difficult to determine precisely what “professional development” is referring to.

In practice, professional development for educators encompasses an extremely broad range of topics and formats. For example, professional-development experiences may be funded by district, school, or state budgets and programs, or they may be supported by a foundation grant or other private funding source. They may range from a one-day conference to a two-week workshop to a multiyear advanced-degree program. They may be delivered in person or online, during the school day or outside of normal school hours, and through one-on-one interactions or in group situations. And they may be led and facilitated by educators within a school or provided by outside consultants or organizations hired by a school or district.

1.3 CHARACTERISTICS OF TEACHER PROFESSIONAL DEVELOPMENT

There can be no “one size fits all” approach to effective teacher professional development. “Differences in communities of school administrators, teachers and students uniquely affect professional development processes and can strongly influence the characteristics that contribute to professional development's effectiveness”. (Guskey, 2003). To have the greatest impact, professional development must be designed, implemented and evaluated to meet the needs of particular teachers in particular settings (Guskey, 1995). But several characteristics of high quality teacher professional development can be service from research on a wide variety of approaches (Guskey, 2003). The following are some of the most consistently cited factors.

1. Content- focused:

Several studies demonstrate that teacher's skills and understanding are directly related to the degree that professional development experiences focus on subject matter content (Birman, Desimone, Garet and Porter, 2000). Being ‘content-focused’ means also considering student's prior knowledge related to the content and strategies teachers can use to actively engage students in developing new understandings (Cohé, Hill & Kennedy, 2002)

2. Extended:

Extended professional development experiences, rather than one time sessions, allow for more substantive engagement with subject matter, more opportunities for active learning, and the development of coherent connections to teacher's daily work. (Birman, Desimone, Garet & Porter, 2000)

3. Collaborative:

“Teacher learning is most likely when teachers collaborate with professional peers, both within and outside of their schools and when they gain further expertise through access to external researches and program developers”. (King and Newmann, 2000).

“professional development activities that include collective participation -that is, the participation of teachers from the same department, subject or grade are more likely to afford opportunities for active learning and are more likely to be coherent with teacher's other experiences.” (Birman, Desimone, Garet and Porter, 2000)

4. Part of Daily Work:

Professional development should be largely school-based and incorporated into the day to day work of teachers. (National partnership for Excellence and accountability in teaching, No date)

5. Ongoing:

Several studies indicate that professional development should be continuous, not episodic, and include follow up and support for further learning (association for supervision and curriculum development, 2003)

6. Coherent & Integrated:

Professional development should incorporate experiences that are consistent with teacher's goals; aligned with standards, assessments and other reforms initiatives and informed by the best available research evidence. (Birman, Desimone, Garet, Porter & Yoon 2002, Guskey, 2003)

7. Inquiry-based:

Professional development should promote continuous inquiry and reflection through active learning . “Active learning encourages teachers to become engaged in meaningful discussion , planning and practice as part of professional development activity.”(Birman, Desimone, Garet & Porter, 2000)

8. Teacher driven:

Professional development should respond to teacher’s self identified needs and interest in order to support individual and organisational improvements. Professional development is more meaningful to teachers when they exercise ownership of its content and process.(King & Newmann,2000)

9. Informed by student performance:

Analysis of impacts on student performance should inform professional development (Guskey, 2003 :National partnership for Excellence and accountability in teaching ,no date, association for supervision and curriculum development, 2003)

10. Self- evaluation:

Professional development should include procedures for self- evaluation to guide teachers in their ongoing improvement efforts(Guskey, 2003).

1.4 NEED AND IMPORTANCE OF PROFESSIONAL DEVELOPMENT

Changes of the magnitude discussed in reform efforts will require educators to learn new techniques(Borko, 2004) and gain a better understanding of the subject areas taught(Garet et al.,2001) . Professional development provides an avenue for educators to improve their teaching practices (Lawless & Pellegrino, 2007). To reach the expectations established, a teacher must have a deep understanding of the subjects he or she teaches, have the ability to communicate this information to students and encourage higher level thinking in the classroom (Garet et al., 2001). Teachers are generally supportive of establishing higher expectations in regards to teaching and learning (Guskey , 2002) . However, the techniques many current educators learned about how to teach did not involve helping student gain a deep understanding of the contents (Darling-Hammond & McLaughlin, 1995). Therefore, educators are often unprepared to implement the teaching practices required to meet the established expectations (Guskey, 2002) . More rigorous standards and a shift in educational expectations will require teachers to gain a deeper understanding of the subject matter and the ways in which students learn the information (Garet et al., 2001) . To achieve positive educational reform, a shift must take place during which the needs of adults are taken onto account rather than simply focusing on student deficits (Templeton & Tremont , 2014). Professional development offers opportunities for teachers to obtain a broader and deeper skill set of the subject areas taught (Lawless & Pellegrino, 2007). In addition, these activities allow educators to develop strategies for implementing new teaching practices in the classroom.

1.5 Importance of Professional Development for Teachers

Education is a learning cycle without an end. It is not going to stop after graduation and starting a career. Continuing education helps career-minded individuals to continually improve their skills and become more professional at their work. It is particularly important for school administrators in the field of primary and secondary education management to enable [professional development for teachers](#), not only to give their students the best learning results but also to be more effective and fulfilled throughout various other aspects of their job.

1.5.1 Better Learning Outcomes for Students

Educational technology, guidelines for school districts, and standards for curricula are continually changing. This makes it challenging for teachers to keep up with trends and best practices in the field. Professional development for teachers turns teachers into stronger and more fitting teachers by allowing them to produce useful and personalized lessons for the students today. Research has shown that as a result of student achievement will increase by as much as 21 percentile points as a result of professional development for teachers. Professionalism in teacher education is the dire need of the hour. Knowledge and experience alone are not enough for teachers in their entire careers to supporting them. National Board Certification is one option for teachers abroad for seeking professional development and for adhering to the current educational standards to ensure optimal learning for students. Studies have supported that students taught by the teachers who had National Board Certification had higher scores in all subjects as compared to the students of the teachers without a National Board Certification.

1.5.2 Teachers Find New Ways to Teach

Through discovering new teaching strategies through professional development for teachers, educators can go back to the classroom and make changes to their teaching styles and curricula to better suit their students' needs. Nonetheless, these improvements are difficult to assess, as they are usually introduced slowly. Through introducing educators to new delivery techniques, assessment styles, and record-keeping approaches, [professional development for teachers](#) makes them more effective in their presentations and course assessments.

1.5.3 Teachers Develop Better Skills in Organizing and Management

Much of the teachers' time is spent on student evaluations, curriculum development, and other paperwork in addition to the hours spent in classroom preparation. Professional development for teachers can help teachers to plan their time better and stay organized. This makes teachers more efficient and gives them extra time to focus not on paperwork but students.

1.5.4 Teachers Gain Knowledge and Insight into Industry

Students expect teachers to be specialists in the subject matter for the topics they teach. Professional development for teachers ensures that teachers should be able to answer every question that a student throws in. Professional development programs will allow teachers to

expand their knowledge base in various areas of the subject. The more the professional development a teacher undergoes, the more he or she develops knowledge and insight into the industry.

1.5.5 Teachers Want to Pursue Their Education

Teachers find it easy to get burdened with the grind of teaching. Professional development for teachers gives them a chance to step out of their routine— they become the student rather than the teacher. It keeps educators motivated as they know they get the professional assistance they need to be better teachers. It keeps educators motivated as they know they get the professional support they need to be better teachers. After all, professional development nurtures the skills of teachers willing to take on leadership positions in education, and teachers need to learn from other experienced leaders to become effective leaders themselves in the future.

1.5.6 Why Should Teachers Set Professional Goals?

Professional development and the setting of goals go hand in hand. The time to devote to courses and seminars may seem hard to schedule, but the extra time is worth it to become the best teacher you can be. Setting career teaching goals that are both realistic and achievable will help you achieve what you would like. Goals must be measurable by setting a timeline. You must see how far you can go as a teacher.

1.5.7 List of Professional Goals for Teachers

The secret to moving your career forward is to reflect, plan, prepare, and take action. Setting goals on a calendar will give you a timetable and a concentration. For example, each quarter (3 months), make a goal of attending a talk or seminar on professional development. Choose and record a subject you would like to know more about or are unfamiliar with though it is something as small as a one-hour webinar. Take notes, absorb the information, and make good use of your newfound knowledge. It is vital that as a teacher, you ask specific questions to yourself like; What would I want to do in my classroom? What professional goals should I set so that my classroom has the best learning atmosphere? How do I interact with my classroom in a better way? etc. Once the goals are set, a teacher needs to work hard towards it in order to get a sense of accomplishment.

Implementing the advancement of professional education has advantages for both teachers and students, but, most significantly, it helps teachers become better educators and grow into qualified future school administrators. Ultimately [professional development for teachers](#) helps a teacher overcome all the significant obstacles he or she faces in the classroom and is an ideal way to build a classroom of dreams!

1.6 THE MODELS OF HIGH QUALITY TEACHER PROFESSIONAL DEVELOPMENT

There are models of professional development that incorporate several of these characteristics of high quality.

1.6.1 Mentoring: Mentoring gives novice and master teachers opportunities to learn from each other. It can help new teachers learn to creatively and effectively meet the day-to-day challenges of teaching. Mentoring occurs around activities such as classroom observation, coaching, feedback, and the collaborative teaching. Mentoring can have dramatic effects on teachers, that include increased retention, improved attitudes, increasing feelings of efficacy and control and experience using a wider range of instructional strategies (Smith, 2002).

1.6.2 Content Based Collaborative Inquiry (CBCI) & Cognitively Guided Instruction (CGI): In CBCI and CGI, teachers work together to create deeper understandings of how their students think about and understand particular subjects. In CBCI, teachers and facilitators pose questions about student's understandings, collect and analyse data, share the results with their colleagues and collaborate to create instructional solutions. In the process, teachers build understandings of content and pedagogy that support student learning (Bray, Gause-Vega, Goldman, Secules & Zech, 2000). In CGI, teachers create models of how students think and solve problems. Teachers use these models of student thinking to develop instructional materials that address student's learning needs. CGI provides opportunities for teachers to deepen their own understandings of subject matter, while they develop ways to teach it more effectively (Carpenter, Fennema, Franke & Levi, 2001).

1.6.3 Lesson Study: Lesson study is a multi step process in which teachers work together to create, study and improve their lessons. In this approach, a member of the study group teaches a lesson while others make detailed observations. After the lesson, all members of the group meet to discuss their observations and to consider how the lesson might be improved. The lesson is taught again to a different group of students and the process of observation, collaborative data analysis and lesson revision is repeated (Fernandez and Chokshi, 2002; Watanabe, 2002). Lesson study is another model of using collaborative self study of teacher's practices as a means to support teacher growth and instructional improvement (Mid-Atlantic Eisenhower Regional Consortium, 2002).

1.7 PRESENT SCENARIO OF TEACHER PROFESSIONAL DEVELOPMENT

Professional development training of primary school teachers and principal is organised by state government. Every year once or twice training program is organised. They have activities which is based on content power and educational policy. Last year they training program named 'Nishtha' and 'Chetana'. They had also online training program during pandemic. This online training program is organised by DIET.

Government also organises program for check student's achievement and how to do home learning. They organised program on 'Nidan kasoti' and 'Ekam kasoti'.

1.8 RATIONALE OF THE STUDY

Teachers learn best through professional development that addresses their needs (Meissel et al., 2016). The theoretical framework of adult learning theory shares the need for ongoing quality professional development which requires teachers to become lifelong adult learners (Eleonara, 2003; Hiebert, Gallimore & Stigler, 2002). Professional development needs include many different activities. Some activities focus on students with special needs and

8

managing the classroom. Other activities involve designing curriculum and unit planning (Garet et al., 2001; Pehmer, Groschner & Seidel, 2015). From the school administrative side, some suggested managing budgets and purchasing (Sagir & Memisoglu, 2013). Evers et al. (2016) cited activities dealing with teaching strategy support, information on where to search for needed resources, classroom management and parental involvement. Daresh (2003) also cited activities necessary for beginner teachers to include how to plan classes, manage student behaviour and work within district rules. He also mentioned personal concerns and teaching concerns. The recognition and respect for the leadership abilities of teachers and all members of the school community is essential (Witte and Jansen, 2016). Teachers need to be empowered to further develop expertise in subject matter content, Technologies and other essential elements that lead to high standards for quality teaching (Korkko, Kyyro-Ammala, & Turunen, 2016; Witte & Jansen, 2016).

Nowadays there are so many new innovations in teaching field like ICT, online teaching and training through use of technology. So it is very important role of teacher for teach through new strategies. Therefore through professional development practices, teachers can learn and teach by using new methods.

In India very few researches found related to professional development activity of primary school teachers. It is being done with different methodology. I think there is need of quality improvement in teacher professional development activity. That's why researcher is doing research on professional development program of primary school teachers and principals.

1.9 RESEARCH QUESTIONS

The following research questions:

1. What are different professional development practices in the elementary school?
2. What are difficulties faced in professional development of elementary school teacher?

1.10 STATEMENT OF THE PROBLEM

A Study of professional development practices in the elementary schools of Vadodara city.

1.11 OBJECTIVES OF THE STUDY

The study has the following objectives:

1. To identify professional development needs.
2. To study different professional development practices.

1.12 EXPLANATIONS OF THE TERMS

Professional development: It refers to those activities which are conducted for teachers for enhancing their professional development growth.

Practices: Those activities which are conducted for teachers for their professional development.

Elementary school: where teaching of 1 to 8 standard happens.

1.13 DELIMITATIONS OF THE STUDY

Delimitations of the study is delimited to Gujarati Medium School run by Municipal corporation of Vadodara city.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

A literature review surveys scholarly articles, books, dissertation and other resources which are relevant to a particular issue, area of research or theory and provides context for a dissertation by identifying past research. Research tells a story and the existing literature helps us identify where we are in the story currently. It is up to those writing a dissertation to continue that story with new research and new perspectives but they must first be familiar with the story before they can move forward.

2.1 STUDIES REVIEWED

Mishra (1999) studied the In service training requirement of the primary school teachers in the state of Orissa. This study is survey in nature. The researcher has constructed a questionnaire for primary school teachers and an opinionnaire for teacher educators and supervisors of Orissa organizing in-service training for primary school teachers in the state. The data collected were analysed qualitatively. The major objective of this study is to find out the requirements of in-service training programmes for the primary school teachers. Researcher found that about 37% of teachers of the state have opined for separate in-service training on methodology where as about 41% of teachers of the state have suggested to get orientation on methodology along with the content.

Matliwala (2009) studied the Inservice training programmes at Primary education level in Surat district. This study is survey in nature. The researcher had constructed a questionnaire for primary school teachers. The objective of this study is to know about reasons of join training. Researcher found that most of teachers join training for their professional development , for their interest , to know about teaching and learning method, etc .

Sharma(2010) studied the effect of teacher education programme on professional development and capacity building of secondary school teachers. The study was conducted through descriptive method of research. To fulfill the objectives of the present study, researcher used a sample of teachers who had attended the in-service programmes organised by DIETs/ SCERT. From this study researcher found that there is a significant difference in professional commitment among teachers of science and arts stream at secondary school level.

Kumar (2011) studied the Inservice teacher training programme under Sarva Shiksha Abhiyan in Himachal Pradesh. This study is survey in nature. Interview, questionnaire, acquaintance test , classroom observation etc tools are used. The main objective of this study were to make an appraisal of the training modules of inservice teacher training programme in terms of time schedule , objectives, content and evaluation mechanism and follow up. Researcher find that- the time schedule of inservice training ranged from 2 to 19 days from the year 2002-03 to the year 2009-10. As per the objectives of the training programme the emphasis was given to make the teacher component to use various devices, sensitization of teachers about gender issues, to familiarize the teachers with child centered approaches, joy-

full learning , activity based teaching, etc. In content weightage , in the year 2002-03, 2004-05, 2005-06 and 2009-10, 70%-80% weightage was given to theory and 20%-30% weightage to practical activities. However in the year 2003-04 and 2007-08, more than 60% weightage was given to theory. In evaluation mechanism and follow up, during the training each and every participant had to demonstrate a lesson before the other participants, to be evaluated on the same and was given feedback on the same. After the training programme no follow-up mechanism was followed in any of the selected districts by the DIETs.

Aminudin(2012) studied the teachers' perceptions of the impact of professional development on teaching practice. Which is case study of one primary school. This research examines teachers' perceptions of the impact of their professional development experience on teaching practice. This research takes the form of a qualitative study that employs three research instruments :document analysis ,questionnaires that are filled in by all the teachers and five semi-structured interview sessions. This study stresses on the need for to the participants to experience one professional development program at a time and to have sufficient support and follow up during that time to ensure that changes in teaching practice are best sustained .

Pillai (2013) studied the In service teacher training programmes under Sarva Shiksha Abhiyan in Kerala and Tamilnadu. This study is a descriptive study designed in a comparative framework and the data were collected through survey method. Questionnaire for teachers and focus group discussion format are used as tools. The major objective of this study is to compare inservice teacher training programmes organized under SSA in Kerala and Tamilnadu with respect to nature of training , mode of delivery and monitoring. Researcher find that both Kerala and Tamilnadu provide 20 days of in-service programme of primary teachers per academic year as per SSA framework and follow split up model for organizing inservice training for elementary teachers.

Hooks (2015) studied towards more effective teacher professional development Initiatives. This qualitative case study's purpose was to reveal major barriers to TPD implementation and provide suggestions for crafting more impactful TPD. Based on the social constructivist foundation, this study sought to address the factors that increase teacher's receptiveness to more effective teaching techniques. It explored middle school teacher's perceptions of TPD, its connection to student achievement, and factors influencing implementation. Researcher's findings encourage positive social change by providing insight into crafting more impactful TPD.

Yarema (2015) studied the impact of a professional development program on Teacher's practice and how context variables influenced such practice. It is a case study. The purpose of this case study was to examine the impact of a state funded professional development program on a specific group of teachers practice. The study also explored contextual variables related to district restructuring and school implementation of district policies and their impact on teacher practice. From this study researcher found that district and school policies must provide adequate support for teachers to implement what is learned in professional development to enact any effective science education reform at the elementary school level.

Bishop (2016) studied the impact of ongoing professional development on Math achievement. This quantitative study analyzed TCAP end-of-course test score data for Algebra 1 and Algebra 2 courses following the implementation of an ongoing professional development program. The study was established to determine what, if any, ongoing, coherent professional development program had on capital TVAAS test scores. Math teachers at the selected East Tennessee High Schools participated in an ongoing professional development program throughout the 2013-14 and 2014-15 School years. Findings from this study support the use of ongoing, coherent professional development in a high school setting.

Smith (2016) studied about professional development effects on teacher's self-regulated learning. This dissertation takes up issues around the misalignment between teacher development and "21st century" learning skills. A social cognitive framework is applied to think through this problem of practice unique to 21st century communities of learning. Key issues in teacher development such as the transfer of learning are addressed through a professional development model, designed by the student investigator, with the aim of improving self-regulated learning outcomes for students and teachers alike. The professional development sequence involved training educators in an evidence-based framework based on principles of neuroscience called Universal design for learning (C A S T) and supported them with implementation through goal-directed lesson study aimed to support adjustments to instructional practice. A mixed methods approach was used to assess the efficacy of the intervention. Positive results were identified and led to the conclusion that a goal-directed professional development sequence does support the self-regulated learning of teachers and also leads to adjustments in instructional practice. Here, researcher led to the conclusion that a goal-directed professional development sequence does support the self-regulated learning of teachers and also leads to adjustments in instructional practice.

Yoon (2016) studied the professional development & its impact on teacher and pupil learning. The aim of this study was to explore teacher's professional learning in a community of practice (COP) in South Korea and its impact on teacher's and pupil's learning. The study employed qualitative research methods within a case study framework. Data were collected in South Korea from September 2014 to June 2015. Five different data collection tools were used: individual interviews, observation, focus group, open-ended questionnaires and document analysis. Yoon found that teacher's professional learning and its links to pupil's learning were influenced by factors at the micro, meso and macro levels.

Moore (2016) studied about principal's perspectives on the professional development process and its outcomes. This study examined principal's perspective on the professional development process and its outcomes. Principals are in the best position to ensure a connection between research-based best practices and what actually happens in the classroom, but there is little research on how principals actually select professional development for their staff in the field. This study was conducted in a Midwestern state using data gathered from public elementary school principals in the form of a survey. Moore's result indicated that self-reported influences on satisfaction, funds available for professional development and principal's perceived control over the process are the strongest predictors of principal satisfaction with professional development outcomes.

Subramaniyan (2017) studied the In Service training program about children with special education needs and inclusive education for general education teachers. This study followed pretest- posttest experimental design with the sample group and is analytical in nature. The objective of this study is to find out the attitude of general education teachers about children with special education needs and inclusive education . Researcher found that general education teachers demonstrated more favorable Attitudes towards children with special education needs and Inclusive education following the inservice training program on inclusive education.

2.2 IMPLICATIONS OF THE REVIEW OF RELATED LITERATURE

For the proposed study a total of 13 research studies have been reviewed. Out of which 6 study were conducted in India and 7 studies were conducted in different foreign countries. Studies related to professional development of teachers conducted in India are Mishra (1999), Matliwala (2009), Sharma(2010), Kumar (2011), Pillai (2013) and Subramaniyan (2017). Studies of Yarema (2015), Aminudin (2012), Bishop (2016), Smith (2016), Hooks (2015), Yoon (2016) and Moore (2016) were the studies conducted abroad.

On the basis of analysis four studies were found to be case study(Yarena, 2015; Aminudin, 2012; Hooks, 2015; Yoon, 2016).One study used mixed method approach(Smith, 2016), one study in quantitative(Bishop; 2016) and five in form of survey(Mishra, 1999; Matliwala, 2009; Kumar, 2011; Pillai, 2013; Moore, 2016).

Mishra (1999) studied on In service training requirement of the primary school teachers in the state of Orissa. **Matliwala (2009)** studied on Inservice training programmes at Primary education level in Surat district. **Kumar (2011)** studied on Inservice teacher training programme under Sarva Shiksha Abhiyan in Himachal Pradesh. **Yarema(2015)** studied on the impact of a professional development program on teacher's practice and how context variables influenced such practice. **Aminudin(2012)** studied on teacher's perceptions of the impact of professional development on teaching practice. **Sharma(2010)** studied on effect of teacher education programme on professional development and capacity building of secondary school teachers. **Bishop(2016)** studied on impact of ongoing professional development on Math achievement. **Pillai (2013)** studied on In service teacher training programmes under Sarva Shiksha Abhiyan in Kerala and Tamilnadu. **Smith(2016)** studied about professional development effects on teacher's self regulated learning. **Hooks((2015)** studied towards more effective teacher professional development initiatives. **Yoon (2016)** studied on professional development& it's impact on teacher and pupil learning. **Moore (2016)** studied about principal's perspectives on the professional development process and its outcomes. **Subramaniyan (2017)** studied on In Service training program about children with special education needs and inclusive education for general education teachers.

Mishra (1999) constructed a questionnaire for primary school teachers and an opinionnaire for teacher educators and supervisors of Orissa organizing in-service training for primary school teachers in the state. The data collected were analysed qualitatively. Matliwala(2009) constructed a questionnaire for primary school teachers. In Kumar(2011) Interview, questionnaire, acquaintance test , classroom observation etc tools are used. In Pillai(2013) the

data were collected through survey method. Questionnaire for teachers and focus group discussion format are used as tools. Yarema (2015) done data collection from multiple sources including direct observations, surveys, interviews, and artifacts such as electronic portfolios, lesson plans and submitted assignment responses. Aminudin (2012) , used three research instruments: document analysis, questionnaires that are filled in by all the teachers and five semi structured interview sessions. Sharma(2010) used questionnaire .Bishop (2016) took t-test was utilized to compare the pre and post test score data. Smith (2016) administered as a census survey intended to gather feedback from everyone within the initial target population of teachers. Hooks (2015) used semi structured interview with open ended questions helped to identify emergent themes. Yoon(2016) used five different data collection tools: individual interviews, observation, focus group, open ended questionnaire and document analysis. Moore(2016) used questionnaire as a tool. Subramaniun(2017) followed pretest- posttest experimental design with the sample group and is analytical in nature.

The researcher came across these many studies related to professional development, for school principals and secondary school teachers. Out of literature reviewed the researcher did not find professional development practices of primary school teachers of Municipal Corporation schools. Therefore, in the present study the researcher will study the professional development practices in the elementary school of Vadodara Municipal Corporation.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 INTRODUCTION

In any given investigation, it is desirable to identify and use the most appropriate research method based on the objectives of the study. The decision about the method to be employed however depends upon the nature of the problem selected and the kind of data necessary for its solution. Any research program should really add not on to the fund of knowledge but also to provide the possible solution to some of the vital issues in the society.

This chapter provides an idea about how the entire research study was conducted. It speaks about the sampling procedure adopted by the investigator, design and development of tools for the study with respect to various objectives, method used for the collection of data and data analysis done for the interpretation of the results.

3.1 Methodology of the study :

Descriptive survey research design method was used in the present study. Following process was used in the present study.

3.2 Population of the study:

The population of the this study is consist of all elementary schools of Gujarat run by municipal corporations.

3.3 Sample of the study:

There are 120 schools in the year 2020 which run by Vadodara municipal corporation (VMC), from these 30 schools is selected by random sampling technique. From each school 1 principal and 5 teachers is selected, so sample is 30 principals and 150 teachers. While final sample consisted of 28 principals and 136 teachers.

3.4 DESCRIPTION OF TOOLS

Questionnaire: is used for collected data for objective 1 and 2, in which items are related to need identification, professional development practices . there are 24 items. Questions are close ended. Questions were prepared by researcher. All questions are translated from English into Gujarati.

In need identification question is related to need of professional development, in which field and which subject they need professional development, etc.

In professional development practices questions are related with objectives of professional development, programs of professional development activity, how many times they have professional development activity during a year, duration of activity, organiser of activity, activity happened during pandemic, infrastructure-safety-security of professional development

program, resource person's competency and adequate knowledge skills, increase job accomplishment after training, more security need for women teachers and principals during training, increase learning skills for teachers and administrative skills for principal after training, satisfaction of professional development activity, etc.

3.5 Procedure of data collection

Data collection is completed in the April 2021, in online mode by google form. Google forms are sent to 30 principals and 130 teachers. And received 28 principals and 136 teachers.

3.6 Analysis of data

Detail description of analysis and interpretation of data is there in chapter 4.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

Data analysis is the process of systematically applying statistical techniques to describe and illustrate, condense and recap and evaluate data. Data from various sources is gathered, reviewed and then analysed to form some sort of finding and conclusion.

For the present study all collected data are analysed by using frequency and percentage.

4.1 OBJECTIVE WISE DATA ANALYSIS AND INTERPRETATION

OBJECTIVE 1. To identify professional development needs.

OBJECTIVE 2. To study different professional development practices.

1. Need for professional development

Table 4.1

Responses	Frequency	%
Yes	134	98.5
No	2	1.5

98.5% teachers need professional development where 1.5% don't need.

Table 4.2

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals need professional development .

2. Need for professional development in different areas

TABLE 4.3

Responses	Frequency	%
Teaching subjects	27	19.9
Information and communication technology	81	59.6
Co-curricular activity	10	7.4
Classroom management	11	8.1
Pedagogy	2	1.5
Assessment and evaluation	5	3.7

19.9% teachers need professional development in teaching subjects, 59.6% wants in Information and communication technology, 7.4% wants in co-curricular activity, 8.1% wants in classroom management, 1.5% wants in pedagogy while 3.7% wants in assessment and evaluation.

TABLE 4.4

Responses	Frequency	%
Teaching subjects	2	7.1
Information and communication technology	24	85.7
Co-curricular activity	0	0
Classroom management	1	3.6
Pedagogy	0	0
Assessment and evaluation	1	3.6

7.1% principal need professional development in teaching subjects, 85.7% wants in Information and communication technology, 3.6% in classroom management, 3.6% in assessment and evaluation.

3. Need of training in different subjects

TABLE 4.5

Responses	Frequency	%
Science	29	21.3
Maths	22	16.2
English	32	23.5
Computer	46	33.8
Environment science	4	2.9
Hindi	1	0.7
Social science	2	1.5

21.3% teachers wants training in science, 16.2% in maths, 23.5% in English, 33.8% in Computer, 2.9% in Environment science, 0.7% in Hindi, 1.5% in Social science.

TABLE 4.6

Responses	Frequency	%
Science	3	10.7
Maths	4	14.3
English	9	32.1
Computer	10	35.7
Environment science	2	7.1
Hindi	0	0
Social science	0	0

10.7% principal wants training in science, 14.3% in Maths, 32.1% in English, 35.7% in computer, 7.1% in Environment science.

4. Need of training in different field during pandemic

TABLE 4.7

Responses	Frequency	%
Online pedagogy	67	49.3
Digital tools of learning	39	28.7
Digital tools of assessment	18	13.2
Above all	12	8.8

During pandemic, 49.3% teachers needs training in online pedagogy, 28.7% in Digital tools of learning, 13.2% in Digital tools of assessment and 8.8% in above all.

TABLE 4.8

Responses	Frequency	%
Online pedagogy	16	57.1
Digital tools of learning	5	17.9
Digital tools of assessment	4	14.3
Above all	3	10.7

During pandemic, 57.1% principals need training in online pedagogy, 17.9% in digital tools of learning and 10.7% in above all.

5. Professional development activity happened in schools

TABLE 4.9

Responses	Frequency	%
Yes	134	98.5
No	2	1.5

98.5% teachers have professional development activity in schools where 1.5% teachers don't have.

TABLE 4.10

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals have professional development activity in schools.

6. Knowledge about professional development training's objectives

TABLE 4.11

Responses	Frequency	%
Yes	129	94.9
No	7	5.1

94.9% teachers have knowledge about objectives of professional development training, while 5.1 don't have.

TABLE 4.12

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals have knowledge about objectives of training.

7. Different programs of professional development training.

TABLE 4.13

Responses	Frequency	%
workshop	50	36.8
Training program	66	48.5
conference	8	5.9
seminar	8	5.9
Above all	4	2.9

36.8% teachers have training through workshop, 48.5 have training program, 5.9% have conference, 5.9 have seminar, 2.9 have all the programs.

TABLE 4.14

Responses	Frequency	%
workshop	3	10.7
Training program	20	71.4
conference	1	3.6
seminar	3	10.7
Above all	1	3.6

10.7% principals have professional activity through workshop, 71.4% have training program, 3.6% have conference, 10.7% have seminar, while 3.6% have all programs.

8. Need of change in professional development training

TABLE 4.15

Responses	Frequency	%
Yes	125	91.9
No	11	8.1

91.9% teachers want change in professional development training, where 8.1% don't want any change.

TABLE 4.16

Responses	Frequency	%
Yes	24	85.7
No	4	14.3

85.7% principals want change in professional development training, where 14.3% don't want any change.

9. Total number of professional development activity happened during a year

TABLE 4.17

Responses	Frequency	%
One	120	88.2
Two	14	10.3
Three	2	1.5

88.2% teachers have one time professional development activity during a year, 10.3% teachers have two times and 1.5% have three times.

TABLE 4.18

Responses	Frequency	%
One	23	82.1
Two	5	17.9
Three	0	0

82.1% principals have one time professional development activity during a year, 17.9% have two times.

10. Duration of professional development program

TABLE 4.19

Responses	Frequency	%
1 day	106	77.9
3 days	30	22.1
7 days	0	0
1 month	0	0

77.9% teachers have 1day professional development program and 22.1% teachers have 3 days professional development activity.

TABLE 4.20

Responses	Frequency	%
1 day	27	96.4
3 days	0	0
7 days	1	3.6
1 month	0	0

96.4% principals have 1 day professional development activity and 3.6% principals have 7days professional development activity.

11. Adequate time for professional development activity

TABLE 4.21

Responses	Frequency	%
Yes	132	97.1
No	4	2.9

97.1% teachers say professional development activity's time is adequate where 2.9% teachers say not adequate time.

TABLE 4.22

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals says professional development activity's time is adequate.

12. Organiser of professional development activity

TABLE 4.23

Responses	Frequency	%
State govt.	92	67.6
School	9	6.6
Education dept.	21	15.4
Central govt.	2	1.5
DIET	12	8.8

67.6% teacher's professional development activity is organised by state government, 6.6% by school, 15.4% by Education department, 1.5% by central government, 8.8% by DIET.

TABLE 4.24

Responses	Frequency	%
State govt.	11	39.3
School	1	3.6
Education dept.	12	42.9
Central govt.	1	3.6
DIET	3	10.7

39.9% principal's professional development activity is organised by state government, 3.6% by school, 42.9% by Education department, 3.6% by central govt, 10.7% by DIET.

13. During corona professional development training organised

TABLE 4.25

Responses	Frequency	%
Yes	129	94.9
No	7	5.1

94.9% teachers had professional development activity organised during corona while 5.1% had not.

TABLE 4.26

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals had professional development activity organised during corona.

14. Organiser of online professional development training

TABLE 4.27

Responses	Frequency	%
State govt.	71	52.2
School	7	5.1
Education dept.	19	14
DIET	39	28.7
Other	0	0

52.2% teacher's online professional development activity is organised by state govt, 5.1% by school, 14% by Educational dept, 28.7% by DIET.

TABLE 4.28

Responses	Frequency	%
State govt.	13	46.4
School	2	7.1
Education dept.	2	7.1
DIET	10	35.7
Other	1	3.6

46.4% principal's online professional development activity is organised by state govt, 7.1% by school, 7.1% by Education dept, 35.7% by DIET, 3.6% by others

15. Competent resource person

TABLE 4.29

Responses	Frequency	%
Yes	134	98.5
No	2	1.5

98.5% teachers have competent recourse person during training while 1.5% don't have.

TABLE 4.30

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals have competent recourse person during training.

16. Resource person's adequate knowledge skill

TABLE 4.31

Responses	Frequency	%
Yes	133	97.8
No	3	2.2

97.8% teacher's resource person have adequate knowledge skill where 2.2% do not have.

TABLE 4.32

Responses	Frequency	%
Yes	28	100
No	0	0

100% principal's resource person have adequate knowledge skills.

17. Content of resource person is relevance to present time

TABLE 4.33

Responses	Frequency	%
Yes	135	99.3
No	1	0.7

99.3% teachers say that the content of resource person is relevance to present time, while 0.7% say no.

TABLE 4.34

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals say that the content of resource person is relevance to present time.

18. Enough resources during professional development training

TABLE 4.35

Responses	Frequency	%
Yes	133	97.8
No	3	2.2

97.8% teachers have provided enough resources during professional development training, while 2.2% teachers have not.

TABLE 4.36

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals have provided enough resources during professional development training.

19. Proper arrangements during professional development training

TABLE 4.37

Responses	Frequency	%
Yes	132	97.1
No	4	2.9

97.1% teachers have proper arrangements during professional development training, 2.9% don't have.

TABLE 4.38

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals have proper arrangements during professional development program.

20. Safety and security during professional development training

TABLE 4.39

Responses	Frequency	%
Yes	133	97.8
No	3	2.2

97.8% teachers have safety and security during professional development training, 2.2% have not.

TABLE 4.40

Responses	Frequency	%
Yes	27	96.4
No	1	3.6

96.4% principals have safety and security during professional development training, while 3.6% don't have.

21. More safety for ladies teacher during professional development training

TABLE 4.41

Responses	Frequency	%
Yes	80	58.8
No	56	41.2

58.8% teachers say that there is more safety needed for ladies teacher during professional development training, while 41.2% say no.

TABLE 4.42

Responses	Frequency	%
Yes	18	64.3
No	10	35.7

64.3% principals say that there is more safety needed for ladies teacher during professional development activity, while 35.7% say no.

22. Development of teaching skills of teachers

TABLE 4.43

Responses	Frequency	%
Yes	135	99.3
No	1	0.7

99.3% teacher's teaching skills are developed after professional development program, while 0.7% are not.

Development of administrative skills for principal

TABLE 4.44

Responses	Frequency	%
Yes	28	100
No	0	0

100% principal's administrative skills are developed after professional development program.

23. After professional development training increase job accomplishment

TABLE 4.45

Responses	Frequency	%
Yes	135	99.3
No	1	0.7

99.3% teacher's job accomplishment is increase after professional development training, where 0.7% have not increase.

TABLE 4.46

Responses	Frequency	%
Yes	27	96.4
No	1	3.6

96.4% principal's job accomplishment is increase after professional development training, where 3.6% have not increase .

24. Satisfaction of professional development training

TABLE 4.47

Responses	Frequency	%
Yes	134	98.5
No	2	1.5

98.5% teachers are satisfied with professional development training, where 1.5% are not.

TABLE 4.48

Responses	Frequency	%
Yes	28	100
No	0	0

100% principals are satisfied with professional development training.

CHAPTER 5

SUMMARY, FINDINGS AND CONCLUSION

SUMMARY

5.0 INTRODUCTION

Elementary education is very beneficial not only to children, but also the nation at large. It is the foundation of advanced learning. It shapes the lives of people even into adulthood by promoting wise decision making. Children who obtain this education develop many skills such as sharing, turn taking, communication, as well as math skills. They also rapidly develop socially and emotionally as compared to those who never got this basic education. In addition, when a population is educated, the nation does not suffer many losses due to illiteracy of its people who are able to bring about economic development both at the grass root levels and nationality.

Teachers play an important role in the complex process of school development and growth, teachers are main change agents for bringing initiatives and innovations in the classroom practices as well as in school development. Hillman and Stoll (1994) define school development and growth as “ a systematic, sustained effort aimed at change in learning conditions and other related internal condition in one or more schools, with the ultimate aim at accomplishing educational goals more effectively.”

Therefore it is necessary to increase teacher’s effectiveness in elementary schools. So their professional development is very important.

5.1 POLICY PERSPECTIVES

Many policy documents have flagged the importance of investing in teacher development.

In National Policy on Education (1986), the following recommendations are made for the improvement of teacher’s professional competency and their service conditions:

1. The methods of recruitment of teachers will be reorganized to ensure merit, objectivity and conformity with spatial and functional recruitment.
2. The pay and service conditions of teachers have to be improved to commensurate with their social and professional responsibilities.
3. Teacher's associations must play a significant role in upholding professional integrity, enhancing the dignity of the teacher and curbing professional misconduct. National level associations of teachers could prepare a code of professional Ethics for Teachers and see its observance.

NCF 2005

Re-orientation of Teachers

Research in all aspects of children's education was NCERT's primary mandate. The modernization of teacher training was its other given. Teachers should see the child's talk as a resource rather than as a nuisance, the vicious cycle of resistance and control would have a chance to be turned into a cycle of expression and response. Opportunities for individualized reading need to be built at all stages in order to promote a culture of reading, and teachers must set the example of being members of such a culture. Just as the prematurely imposed discipline of pronunciation stifles the child's motivation to talk freely, in her own dialect, for instance, the demand for writing in mechanically correct ways blocks the urge to use writing to express or to convey one's ideas.

Teacher training had remained moribund and commercialization is the only change it is going through. Orissa is the first state that has made provision for up linking with EDUSAT for teleconferencing, ICT, and bringing technology in the classroom. Starting with four schools in Koraput, sitting in their classrooms, students and teachers can access satellite education facilities like curriculum based teaching and training for teachers. Teacher education has to be on going and on site.

Master Trainers

Keeping teacher training as high priority for the advocacy of NCF 2005, NCERT started conducting 3 day training programmes in NCF for Master Trainers who were senior teachers of Central School, Jawahar Navodaya Vidyalayas and other prominent schools in the country. Teachers were exposed to the new inputs and curricular changes and how to go about handling the new textbooks. Besides face to face interaction we also screened CDs - video and audio, to highlight the issues.

Then National Curriculum Framework for Teacher Education(2009) also talk about in-service education and continuous professional development. A series of professional orientation/ training programmes will need to be organized across the State of country to expound the contours of Learner Studies, Contemporary Studies, Educational Studies, Curriculum and Pedagogic Studies which inform the structures of the Framework.

National Education Policy 2020

Continuous professional development: Teachers must be given constant opportunities for self-improvement and to learn the latest innovations and advances in their profession. To ensure that every teacher has the flexibility to optimise their own development as teachers, a modular approach to CPD will be adopted. Developmental opportunities, in the form of local, State, national, and international teaching and subject workshops, as well as online teacher development modules, will be available to all teachers so that each teacher may choose what is most useful for their own development. Platforms (especially online platforms) will be developed so that teachers may share ideas and best practices. Each teacher may be expected to participate in, say, 50 hours of CPD opportunities every year for their own professional development.

Leaders such as school principals and school complex leaders will be have similar modular leadership / management workshops and online development opportunities and platforms to continuously improve their own leadership and management skills, and so that they too may share best practices with each other. Such leaders would also be expected to participate in 50 total hours of CPD modules per year, covering leadership and management, as well as content and pedagogy for the teaching aspects of their jobs.

5.3 MEANING OF PROFESSIONAL DEVELOPMENT

The term “professional development” is defined by the National Staff Development Council (NSDC) to mean “a comprehensive, sustained and intensive approach to improving teacher's and principle's effectiveness in raising student achievement and may be supported by activities such as courses, workshops, institutes , networks and conferences”. The NSDC further reports that effective professional development is essential to school reform.

5.4 CHARACTERISTICS OF TEACHER PROFESSIONAL DEVELOPMENT

There can be no “ one size fits all “ approach to effective teacher professional development. “ Differences in communities of school administrators, teachers and students uniquely affect professional development processes and can strongly influence the characteristics that contribute to professional development's effectiveness”. (Guskey, 2003). To have the greatest impact, professional development must be designed, implemented and evaluated to meet the needs of particular teachers in particular settings(Guskey , 1995). But several characteristics of high quality teacher professional development can be service from research on a wide variety of approaches (Guskey ,2003). The following are some of the most consistently cited factors.

1. Content- focused
2. Extended
3. Collaborative
4. Part of Daily Work
5. Ongoing
6. Coherent& Integrated
7. Inquiry-based

8. Teacher driven
9. Informed by student performance
10. Self- evaluation

5.5 NEED AND IMPORTANCE OF PROFESSIONAL DEVELOPMENT

Changes of the magnitude discussed in reform efforts will require educators to learn new techniques(Borko, 2004) and gain a better understanding of the subject areas taught(Garet et al.,2001) . Professional development provides an avenue for educators to improve their teaching practices (Lawless & Pellegrino, 2007). To reach the expectations established, a teacher must have a deep understanding of the subjects he or she teaches, have the ability to communicate this information to students and encourage higher level thinking in the classroom (Garet et al., 2001). Teachers are generally supportive of establishing higher expectations in regards to teaching and learning (Guskey , 2002) . However, the techniques many current educators learned about how to teach did not involve helping student gain a deep understanding of the contents (Darling-Hammond & McLaughlin, 1995). Therefore, educators are often unprepared to implement the teaching practices required to meet the established expectations (Guskey, 2002) . More rigorous standards and a shift in educational expectations will require teachers to gain a deeper understanding of the subject matter and the ways in which students learn the information (Garet et al., 2001) . To achieve positive educational reform, a shift must take place during which the needs of adults are taken onto account rather than simply focusing on student deficits (Templeton & Tremont , 2014). Professional development offers opportunities for teachers to obtain a broader and deeper skill set of the subject areas taught (Lawless & Pellegrino, 2007). In addition, these activities allow educators to develop strategies for implementing new teaching practices in the classroom.

5.6 Importance of Professional Development for Teachers

Education is a learning cycle without an end. It is not going to stop after graduation and starting a career. Continuing education helps career-minded individuals to continually improve their skills and become more professional at their work. It is particularly important for school administrators in the field of primary and secondary education management to enable [professional development for teachers](#), not only to give their students the best learning results but also to be more effective and fulfilled throughout various other aspects of their job.

5.7 THE MODELS OF HIGH QUALITY TEACHER PROFESSIONAL DEVELOPMENT

There are models of professional development that incorporate several of these characteristics of high quality.

Mentoring: Mentoring gives novice and master teachers opportunities to learn from each other. It can help new teachers learn to creatively and effectively meet the day-to-day challenges of teaching. Mentoring occurs around activities such as classroom observation, coaching, feedback, and the collaborative teaching. Mentoring can have dramatic effects on teachers, that include increased retention, improved attitudes, increasing feelings of efficacy and control and experience using a wider range of instructional strategies (Smith, 2002).

Content Based Collaborative Inquiry (CBCI) & Cognitively Guided Instruction (CGI): In CBCI and CGI, teachers work together to create deeper understandings of how their students think about and understand particular subjects. In CBCI, teachers and facilitators pose questions about student's understandings, collect and analyse data, share the results with their colleagues and collaborate to create instructional solutions. In the process, teachers build understandings of content and pedagogy that support student learning(Bray, Gause-Vega, Goldman, Secules & Zech, 2000). In CGI, teachers create models of how students think and solve problems. Teachers use these models of student thinking to develop instructional materials that address student's learning needs. CGI provides opportunities for teachers to deepen their own understandings of subject matter, while they develop ways to teach it more effectively (Carpenter, Fennema, Franke & Levi, 2001).

Lesson Study: Lesson study is a multi step process in which teachers work together to create, study and improve their lessons. In this approach, a member of the study group teaches a lesson while others make detailed observations. After the lesson, all members of the group meet to discuss their observations and to consider how the lesson might be improved. The lesson is taught again to a different group of students and the process of observation, collaborative data analysis and lesson revision is repeated (Fernandez and Chokshi, 2002; Watanabe, 2002). Lesson study is another model of using collaborative self study of teacher's practices as a means to support teacher growth and instructional improvement (Mid-Atlantic Eisenhower Regional Consortium, 2002).

5.8 PRESENT SCENARIO OF TEACHER PROFESSIONAL DEVELOPMENT

Professional development training of primary school teachers and principal is organised by state government. Every year once or twice training program is organised. They have activities which is based on content power and educational policy. Last year they training program named 'Nishtha' and 'Chetana'. They had also online training program during pandemic. This online training program is organised by DIET.

Government also organises program for check student's achievement and how to do home learning. They organised program on 'Nidan kasoti' and 'Ekam kasoti'.

5.9 RATIONALE OF THE STUDY

Teachers learn best through professional development that addresses their needs (Meissel et al., 2016). The theoretical framework of adult learning theory shares the need for ongoing quality professional development which requires teachers to become lifelong adult learners (Eleonara, 2003; Hiebert, Gallimore & Stigler, 2002). Professional development needs include many different activities. Some activities focus on students with special needs and managing the classroom. Other activities involve designing curriculum and unit planning (Garet et al., 2001; Pehmer, Groschner & Seidel, 2015). From the school administrative side, some suggested managing budgets and purchasing (Sagir & Memisoglu, 2013). Evers et al. (2016) cited activities dealing with teaching strategy support, information on where to search for needed resources, classroom management and parental involvement. Daresh (2003) also cited activities necessary for beginner teachers to include how to plan classes, manage student behaviour and work within district rules. He also mentioned personal concerns and teaching concerns. The recognition and respect for the leadership abilities of teachers and all members of the school community is essential (Witte and Jansen, 2016). Teachers need to be empowered to further develop expertise in subject matter content, Technologies and other essential elements that lead to high standards for quality teaching (Korkko, Kyyro-Ammala, & Turunen, 2016; Witte & Jansen, 2016).

Nowadays there are so many new innovations in teaching field like ICT, online teaching and training through use of technology. So it is very important role of teacher for teach through new strategies. Therefore through professional development practices, teachers can learn and teach by using new methods.

In India very few researches found related to professional development activity of primary school teachers. It is being done with different methodology. I think there is need of quality improvement in teacher professional development activity. That's why researcher is doing research on professional development program of primary school teachers and principals.

5.10 RESEARCH QUESTIONS

The following research questions:

1. What are different professional development practices in the elementary school?
2. What are difficulties faced in professional development of elementary school teacher?

5.11 STATEMENT OF THE PROBLEM

A Study of professional development practices in the elementary schools of Vadodara city.

5.12 OBJECTIVES OF THE STUDY

The study has the following objectives:

1. To identify professional development needs.
2. To study different professional development practices.

5.13 EXPLANATIONS OF THE TERMS

Professional development: It refers to those activities which are conducted for teachers for enhancing their professional development growth.

Practices: Those activities which are conducted for teachers for their professional development.

Elementary school: where teaching of 1 to 8 standard happens.

5.14 DELIMITATIONS OF THE STUDY

Delimitations of the study is delimited to Gujarati Medium School run by Municipal corporation of Vadodara city.

5.15 IMPLICATIONS OF THE REVIEW OF RELATED LITERATURE

For the proposed study a total of 13 research studies have been reviewed. Out of which 6 study were conducted in India and 7 studies were conducted in different foreign countries. Studies related to professional development of teachers conducted in India are Mishra (1999), Matliwala (2009), Sharma(2010), Kumar (2011), Pillai (2013) and Subramaniyan (2017). Studies of Yarema (2015), Aminudin (2012), Bishop (2016), Smith (2016), Hooks (2015), Yoon (2016) and Moore (2016) were the studies conducted abroad.

On the basis of analysis four studies were found to be case study(Yarena, 2015; Aminudin, 2012; Hooks, 2015; Yoon, 2016).One study used mixed method approach(Smith, 2016), one study in quantitative(Bishop; 2016) and five in form of survey(Mishra, 1999; Matliwala, 2009; Kumar, 2011; Pillai, 2013; Moore, 2016).

Mishra (1999) studied on In service training requirement of the primary school teachers in the state of Orissa. **Matliwala (2009)** studied on Inservice training programmes at Primary education level in Surat district. **Kumar (2011)** studied on Inservice teacher training programme under Sarva Shiksha Abhiyan in Himachal Pradesh. **Yarema(2015)** studied on the impact of a professional development program on teacher's practice and how context variables influenced such practice. **Aminudin(2012)** studied on teacher's perceptions of the impact of professional development on teaching practice. **Sharma(2010)** studied on effect of teacher education programme on professional development and capacity building of secondary school teachers. **Bishop(2016)** studied on impact of ongoing professional development on Math achievement. **Pillai (2013)** studied on In service teacher training programmes under Sarva Shiksha Abhiyan in Kerala and Tamilnadu. **Smith(2016)** studied about professional development effects on teacher's self regulated learning. **Hooks((2015)** studied towards more effective teacher professional development initiatives. **Yoon (2016)** studied on professional development& it's impact on teacher and pupil learning. **Moore (2016)** studied about principal's perspectives on the professional development process and its outcomes. **Subramaniyan (2017)** studied on In Service training program about children with special education needs and inclusive education for general education teachers.

Mishra (1999) constructed a questionnaire for primary school teachers and an opinionnaire for teacher educators and supervisors of Orissa organizing in-service training for primary school teachers in the state. The data collected were analysed qualitatively. Matliwala(2009) constructed a questionnaire for primary school teachers. In Kumar(2011) Interview, questionnaire, acquaintance test, classroom observation etc tools are used. In Pillai(2013) the data were collected through survey method. Questionnaire for teachers and focus group discussion format are used as tools. Yarema (2015) done data collection from multiple sources including direct observations, surveys, interviews, and artifacts such as electronic portfolios, lesson plans and submitted assignment responses. Aminudin (2012), used three research instruments: document analysis, questionnaires that are filled in by all the teachers and five semi structured interview sessions. Sharma(2010) used questionnaire. Bishop (2016) took t-test was utilized to compare the pre and post test score data. Smith (2016) administered a census survey intended to gather feedback from everyone within the initial target population of teachers. Hooks (2015) used semi structured interview with open ended questions helped to identify emergent themes. Yoon(2016) used five different data collection tools: individual interviews, observation, focus group, open ended questionnaire and document analysis. Moore(2016) used questionnaire as a tool. Subramaniun(2017) followed pretest- posttest experimental design with the sample group and is analytical in nature.

The researcher came across these many studies related to professional development, for school principals and secondary school teachers. Out of literature reviewed the researcher did not find professional development practices of primary school teachers of Municipal Corporation schools. Therefore, in the present study the researcher will study the professional development practices in the elementary school of Vadodara Municipal Corporation.

5.16 Methodology of the study :

Descriptive survey research design method was used in the present study. Following process was used in the present study.

5.16.1 Population of the study:

The population of this study consists of all elementary schools of Gujarat run by municipal corporations.

5.16.2 Sample of the study:

There are 120 schools in the year 2020 which run by Vadodara municipal corporation (VMC), from these 30 schools is selected by random sampling technique. From each school 1 principal and 5 teachers is selected, so sample is 30 principals and 150 teachers. While final sample consisted of 28 principals and 136 teachers.

5.16.3 DESCRIPTION OF TOOLS

Questionnaire: is used for collected data for objective 1 and 2, in which items are related to need identification, professional development practices. There are 24 items. Questions are close ended. Questions were prepared by researcher. All questions are translated from English into Gujarati.

In need identification question is related to need of professional development, in which field and which subject they need professional development, etc.

In professional development practices questions are related with objectives of professional development, programs of professional development activity, how many times they have professional development activity during a year, duration of activity, organiser of activity, activity happened during pandemic, infrastructure-safety-security of professional development program, resource person's competency and adequate knowledge skills, increase job accomplishment after training, more security need for women teachers and principals during training, increase learning skills for teachers and administrative skills for principal after training, satisfaction of professional development activity, etc.

5.16.4 Procedure of data collection

Data collection is completed in the April 2021, in online mode by google form. Google forms are sent to 30 principals and 130 teachers. And received 28 principals and 136 teachers.

5.16.5 Analysis of data

For the present study all collected data are analysed by using frequency and percentage.

5.17 MAJOR FINDINGS OF THE PRESENT STUDY

5.17.1 Objective 1: To identify professional development needs.

Majority of teachers and principals need professional development training.

Majority teachers and principals need training in ICT , some need in teaching subjects.

From different teaching subjects of primary schools, majority of teachers and principals need training in computer subject.

During pandemic, most of teachers and principals need training in online pedagogy.

5.17. 2 Objective 2. To study different professional development practices.

Majority of teachers and principals have professional development training occurred in their school.

Majority teachers and principals know objectives of professional development activity.

The mode of professional development training for most of teachers and principals is through training program.

Majority teachers and principal want change in professional development activity.

Majority of teachers and principals have one time professional development activity during a year, the duration of this activity is one day for most of teachers and principals.

Most of teachers and principal says that they have adequate time for professional development activity.

Majority of teachers and principals professional development training is organises by state govt. and for some teachers and principals from Education department.

During corona most of teachers and principal had online professional development activity occurred which is mostly organised by state govt and for some teachers and principal had by DIET.

During training Majority teachers and principals have competent Resource person, they have adequate knowledge skill and Content of resource person is relevance to present time.

In training most of teachers and principals have enough resources , proper arrangements, safety and security provide.

Majority teachers and principals need more safety for women teachers and principal.

Most of teachers teaching skills is increase after professional development training.

Most of principal's administrative skills increase after professional development training.

Majority teachers and principal's job accomplishment is increase after professional development training.

Majority teachers and principals are satisfied with professional development training.

5.18 Implications of findings:

Majority teachers and principals need change in training so policy makers have to organise professional development training according to their needs in policy.

Instead of one time state govt. can organise professional development activity twice or three time during a year by workshop, seminar etc.

Every year School can organise professional development activity.

Govt. has to work on more safety for ladies teachers and principals during training.

State govt. has to organise professional development training on ICT for all teachers and principals.

5.19 SUGGESTION FOR FURTHER RESEARCH

A survey based study can be conducted on secondary school teachers and principals professional development training.

A study can be conducted on higher secondary school teachers and principals professional development training .

A comparative study can be conducted on private school professional development activity and grant in aid school professional development activity.

5.20 CONCLUSION:

It is very important for teachers and principals to increase their professional growth. That's why professional development training is very important. Majority teachers and principals need training in ICT. During pandemic, most of teachers and principals need training in online pedagogy. Teachers and principal want change in professional development activity. During training Majority teachers and principals have competent Resource person, they have adequate knowledge skill and Content of resource person is relevance to present time. In training most of teachers and principals have enough resources , proper arrangements, safety and security provide. Teacher's teaching skill and principal's administrative skill is increased after professional development program. They are satisfied with professional development training.

Proper trained teacher can give excellent knowledge to students , with good knowledge a person can change the country.

REFERENCES

- Aminudin, N. A. (2012). Teachers' perceptions of the impact of professional development on teaching practice: The case of one primary school. Retrieved from pdfs.semanticscholar.org
- Association for Supervision and Curriculum Development. (2003) What professional development structures best affect classroom instruction? Translating Education Research into Action. 1(15), 1-4. <http://www.ascd.org/publications/researchbrief/volume1/v1n15.html>. Retrieved November 2003.
- Berne, J. & Wilson, S., M. (1999) Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. In A. Iran-Nejad & P. D. Pearson (Ed.), Review of Research in Education (pp.173-209). Washington, DC: American Educational Research Association.
- Birman, B. F., Desimone, L., Garet, M. S. & Porter, A. C. (2000) Designing professional development that works. Educational Leadership. 57(8), 28-33.
- Birman, B. F., Desimone, L., Garet, M. S., Porter, A. C., & Yoon, K. S. (2001) What makes professional development effective? Results from a national sample of teachers. American Educational Research Journal. 38(4), 915-945.
- Birman, B. F., Desimone, L., Gatet, M. S., Porter, A. C., & Yoon, K. S. (2002) Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. Educational Evaluation and Policy Analysis. 24(2), 81-112.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. Educational Researcher, 33(8), 3-15. doi: 10.3102/0013189X033008003
- Bray, M. H., Gause-Vega, C. L., Goldman, S. R., Secules, T., & Zech, L. K. (2000) Content-based collaborative inquiry: A professional development model for sustaining educational reform. Educational Psychologist. 35(3), 207-217.
- Bishop, M. J. (2016). The impact of ongoing professional development on math achievement. Retrieved from www.cn.edu
- Carpenter, T. P., Fennema, E., Franke, M. L. & Levi, L. (2001) Capturing teachers' generative change: A Follow-up study of professional development in mathematics. American Educational Research Journal. 38(3), 653-689.
- Cohen, D., Hill, H., & Kennedy, M. (2002) The benefit to professional development. American Educator. 26(2), 22-25.
- Daresh, J. C. (2003). Teachers mentoring teachers. Thousand Oaks, CA: Corwin Press
- Darling-Hammond, L., & Bransford, J. (2005). Preparing teachers for a changing world: What teachers should learn and be able to do. San Francisco, CA: Jossey Bass.
- Darling-Hammond, L. & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. Phi Delta Kappan, 76(8), 597-604

Dutro, E., Fisk, M. C., Koch, R., Roop, L. J., & Wixson, K. (2002) When state policies meet local district contexts: Standards-based professional development as a means to individual agency and collective ownership. *Teachers College Record*. 104(4), 787-811.

Eleonora, V. (2003). *Teacher professional development: An international review of the literature*. Paris, France: UNESCO: International Institute for Education Planning. Retrieved from <http://unesdoc.unesco.org/images/0013/001330/133010e.pdf>

Evers, A., Van der Heijden, B., & Kreijns, K. (2016). Organizational and task factors influencing teacher's professional development at work. *European Journal of Training and Development*, 40, 36-55.

Fernandez, C., & Chokshi, S. (2002) A practical guide to translating lesson study for a U.S. setting. *Phi Delta Kappan*. 84(2), 128-134.

Five ways to make teacher professional development effective (2019, April 24). Retrieved from <https://www.prodigygame.com>blog>

Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.

Guskey, T. R. (1995) Results-oriented professional development: In search of an optimal mix of effective practices, North Central Regional Educational Laboratory. http://www.ncrel.org/sdrs/areas/rpl_esys/pdlitrev.htm. Retrieved November 2003.

Guskey, T. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(314), 381-391. doi: 10. 1080/13540600210000051 2.

Guskey, T. R. (2003) Analysing lists of the characteristics of effective professional development to promote visionary leadership. *NASP Bulletin*. 87(637), 38-54.

Guskey, T., & Yoon, K.(2009). What works in professional development? *Phi Delta Kappan*, 90, 495-500.

Hiebert, J., Gallimore, R., & Stigler, J. W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Research*, 31(5), 3-15.

Hiebert, J., Gallimore, R., & Stigler, J. W.(2003) The new heroes of teaching. *Education Week* 23(10), 56, 42 http://www.edweek.org/ew/ew_printstory.cfm?slug=10hiebert.h23. Retrieved November 2003.

Hill, H. C., Beisiegel, M., & Jacob, R. (2013). Professional development research consensus, crossroads; and challenges. *Educational Researcher*, 42, 476-487. doi: 10. 3102/00131 89X13512674

Hooks, L. S. (2015). Towards more effective teacher professional development initiatives. Retrieved from pdfs.semanticscholar.org

Kennedy, M. (1998) Form and substance in inservice teacher education, Research monograph 13, National Institute for Science Education, University of Wisconsin-Madison,

<http://www.msu.edu/~mkennedy/publications/docs/NISE/NISE.pdf>. Retrieved September 2003.

King, M. B. & Newmann, F. M. (2000) Will teacher learning advance school goals? *Phi Delta Kappan*. 81(8), 576-580.

Korkko, M., Kyro-Ammala, O., & Turunen, T. (2016). Professional development through reflection in teacher education. *Teaching and Teacher Education*, 55, 198-206.

Kumar, S. (2011). Inservice teacher training programme under Sarva Shiksha Abhiyan in Himachal Pradesh.

Laeless, K. & Pellegrino, J. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research*, 77(4), 575-614.

Matliwala, K. D. (2009). Inservice training programs at primary education level in Surat district.

Meissel, K., Parr, J., & Timperley, H. (2016). Can professional development of teachers reduce disparity in student achievement? *Teaching and Teacher Education*, 58, 163-173.

Mid-Atlantic Eisenhower Regional Consortium. (2002) What is lesson study? *Research for Better Schools*. V(2), 1-2.

Mishra, P. K. (1999). Inservice training requirement of the primary school teachers in the state of Orissa.

Moore, S. K. (2016). Principal's perspectives on the professional development process and its outcomes. Retrieved from scholarworks.wmich.edu

NCF (2005) National Curriculum Framework.

NCSTE (2009) National Curriculum Framework For Teacher Education.

NEP (2020) National Education Policy.

National Partnership for Excellence and Accountability in Teaching. (no date) Characteristics of effective professional development. <http://www.eric.org/pages/digests/NPEAT.htm>. Retrieved November 2003.

NPE (1986) National Policy on Education.

National Staff Development Council. (2001). NSDC's standards for staff development. Oxford, OH: Author.

National Staff Development Council. (2007). Professional development. Retrieved from <http://www.NSDC.org/connect/about/index.cfm>

Pehmer, A., Groschner, A., & Seidel, T. (2015) How teacher professional development regarding classroom dialogue affects students' higher- order learning. *Teaching and Teacher*

Education, 47, 108-119.

Pillai , R. P. (2013). Inservice teacher training programme under Sarva Shiksha Abhiyan in Kerala and Tamilnadu.

Richardson, V. (2003). The dilemmas of professional development. Phi Delta Kappan, 84, 401-406.

Rhoton, J., & Stiles, K. E. (2002) Exploring the professional development design process: Bringing an abstract framework into practice. Science Educator. 11(1), 1-8.

Sagir, M., & Memisoglu, S. P. (2013). The perceptions of administrators and teachers on elementary school administrators' educational leadership roles. Journal of Research in Education in Education and Teaching, 2, 1-12.

Sharma, L. M. (2010). Effect of teacher education programme on professional development and capacity building of secondary school teachers. Retrieved from shodhganga.inflibnet.ac.in

Smith, S. (2002) Teacher mentoring and collaboration. Journal of Special Education Technology. 17(1), 47-48.

Smith, H. L. B. (2016) Professional development effects on teachers' self-regulated learning.

Subramaniyan , L. (2017). In Service training program about children with special education needs and inclusive education for general education teachers.

Supovitz, J., & Zief, S. G. (2000) Why they stay away: Survey reveals invisible barriers to teacher participation. Journal of Staff Development. 21(4). <http://www.nsdc.org/library/publications/jsd/supovitz214.cfm>. Retrieved January 2004.

Templeton, N. & Tremont, J. (2014). Improving professional practice: Mentoring as job-embedded professional development. Texas Study of Secondary Education, 23(2), 24-28.

The Importance of Elementary Education Education Essay- UK Essays . Retrieved from <https://www.ukessays.com>essays>

The Professional Development of Teachers- OECD(2009). Retrieved from <https://www.oecd.org>

Watanabe, T. (2002) Learning from Japanese lesson study. Educational Leadership. 59(6), 36-39.

Wei, R. C., Darling-Hammond, L., & Adamson, F. (2010). Professional development in the United States: Trends and challenges. Dallas, TX: National Staff Development Council.

Witte, T., & Jansen, E. (2016). Students' voice on literature teacher excellence. Towards a teacher organized model of continuing professional development. Teaching and Teacher Education, 56, 162-172.

Yarema, S. L. (2015). The impact of a professional development program on teachers' practice and how context variables influenced such practice: A case study. Retrieved from

Yoon, K. (2016). Professional development and its impact on teacher and pupil learning: A community of practice case study in South Korea. Retrieved from etheses.bham.ac.uk

APPENDIX: 1

1. Do you have professional development needs?

Yes/no

2. In which of following areas are your professional development needs?

Teaching subjects/information and communication

technology/co-curricular activity/classroom

management/pedagogy/assessment and evaluation

3. In which subject do you want training?

**Science/Maths/English /Social science/Computer /Environmental
science/Hindi**

**4 What type of special training do you feel you required in the future in
pandemic like covid-19?**

**Online pedagogy / digital tools of learning/digital tools of assessment/ all
the above**

5. Is there any professional development activity happens in your school?

Yes / no

6. Do you know the objective of your professional development practice?

Yes/no

7. Through which activity professional development practice happened?

Workshop/training/conference/seminar/ above all

8. Do you want any change in professional development programme?

Yes/ No

9. How many times professional development programme happen during a year in your school?

One/two/three

10. What is the duration of professional development professional development activity?

One day/ three days/ seven days/ one month

11. Do you feel that the time duration of professional development activity is adequate?

Yes/ no

12. Who organise professional development activity?

State govt./Education department/school /centre govt./DIET

13. During covid-19 where online professional development activity happened?

Yes/No

14. Who conducted online activity?

State govt/ school /DIET/ Education dept./other

15. Are the resource person competent?

Yes/no

16. Are the resource person have proper knowledge skills?

Yes /no

17. Is the content given by the resource person is relevance to present time?

Yes /no

18. Are they provide proper infrastructure during professional development activity?

Yes /no

19. Are there proper arrangements during professional development activity?

Yes /no

20. Are they provide safety and security to all participants?

Yes /no

21. Do you feel that women teachers need more safety during professional development activity?

Yes /no

FOR TEACHERS

22 After professional development activity, have your teaching skills increase?

Yes /no

FOR PRINCIPALS

22 After professional development activity, have your Administrative skills increase?

Yes/ no

23 Can your academic achievement is increase after a result of your undergoing professional development training?

Yes / no

24 are you satisfied with professional development activity?

Yes /no

APPENDIX : 2

TRANSLATED QUESTIONS

1. શુ તમને વ્યવસાયિક વિકાસ (પ્રોફેશનલ ડેવલોપમેન્ટ)ની જરૂર છે?

- હા
- ના

2.નીચેનામાંથી કયા ક્ષેત્રમાં તમને વ્યવસાયિક વિકાસ ની જરૂર છે?

- ભણવાના વિષય
- ઇન્ફોર્મેશન અને કોમ્યુનિકેશન ટેકનોલોજી
- સહઅભ્યાસિક પ્રવૃત્તિ
- ક્લાસ રૂમ મેનેજમેન્ટ
- શિક્ષણ શાસ્ત્ર
- અસેસ્મેન્ટ અને ઇવેલ્યુએશન

3. તમને કયાં વિષયમાં ટ્રેનિંગ ની જરૂર છે?

- વિજ્ઞાન
- ગણિત
- અંગ્રેજી
- કોમ્પ્યુટર
- પર્યાવરણ
- હિન્દી
- સામાજિક વિજ્ઞાન

4. તમને ભવિષ્યમાં કોરોના જેવા દેશવ્યાપી રોગ સમયે કયા ક્ષેત્ર મા ટ્રેનિંગ ની વધુ જરૂર લાગે છે?
 - ઓનલાઇન શિક્ષણ શાસ્ત્ર
 - શિખવાના ઓનલાઇન સાધનો
 - એસેસમેન્ટ ના ઓનલાઇન સાધનો
 - ઉપરના બધા
5. તમારી શાળામાં પ્રોફેશનલ ડેવલોપમેન્ટ માટે ટ્રેનિંગ થાય છે?
 - હા
 - ના
6. તમને પ્રોફેશનલ ડેવલોપમેન્ટ ની ટ્રેનિંગ ના હેતુઓ ખબર છે?
 - હા
 - ના
7. કયા પ્રોગ્રામથી તમારી પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ થાય છે?
 - વર્કશોપ
 - ટ્રેનિંગ પ્રોગ્રામ
 - સેમીનાર
 - ઉપરના બધા
8. શું તમે પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગમાં કોઇ બદલાવ લાવવા માંગો છો?
 - હા
 - ના
9. એક વર્ષમાં કુલ કેટલી વાર પ્રોફેશનલ ડેવલોપમેન્ટ પ્રોગ્રામ તમારી શાળામાં થાય છે ?
 - એક
 - બે
 - ત્રણ
10. પ્રોફેશનલ ડેવલોપમેન્ટ પ્રોગ્રામ નો સમયગાળો કેટલો હોય છે?
 - એક દિવસ
 - ત્રણ દિવસ
 - સાત દિવસ
 - એક મહીનો
11. શું તમને પ્રોફેશનલ ડેવલોપમેન્ટ એક્ટિવિટી નો સમય પર્યાપ્ત લાગે છે?
 - હા
 - ના
12. પ્રોફેશનલ ડેવલોપમેન્ટ એક્ટિવિટી નું આયોજન કોન કરે છે?
 - રાજ્ય સરકાર
 - શાળા
 - એજ્યુકેશન વિભાગ
 - કેન્દ્ર સરકાર
 - DIET

13. શુ કોરોના સમયે કોઈ ઓનલાઈન પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગનુ આયોજન થયુ તુ ?

- હા
- ના

14. ઓનલાઈન પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ નુ આયોજન કોણે કર્યુ?

- રાજ્ય સરકાર
- શાળા
- એજ્યુકેશન વિભાગ
- DIET
- અન્ય

15. શુ પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ આપનાર વ્યક્તિ સક્ષમ હોય છે?

- હા
- ના

16. પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ આપનાર વ્યક્તિ પાસે યોગ્ય જ્ઞાન ની કુશળતા હોય છે?

- હા
- ના

17. પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ આપનાર વ્યક્તિ નુ વિષયવસ્તુ અત્યારના સમય પ્રમાણે સુસંગત હોય છે?

- હા
- ના

18. પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ મા પૂરતા સંસાધનો અપાય છે?

- હા
- ના

19. પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ મા બરાબર બધી વ્યવસ્થા હોય છે?

- હા
- ના

20. પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ સમયે બધાને પૂરતી સલામતી અને સુરક્ષા મળે છે?

- હા
- ના

21. શુ પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ દરમિયાન શિક્ષિકા બહેનોને વધારે સુરક્ષા ની જરૂર છે?

- હા
- ના

FOR TEACHER

22. શુ પ્રોફેશનલ ડેવલપમેન્ટ ટ્રેનિંગ પછી તમારી બનાવવાની કુશલતા વિકસે છે?

- હા
- ના

FOR PRINCIPAL

22. શુ પ્રોફેશનલ ડેવલપમેન્ટ ટ્રેનિંગ પછી તમારી વહીવટી કુશલતા વિકસે છે?

- હા
- ના

23. શુ તમે પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ પછી તમારી કાર્ય સિધ્ધિ મા વધારો થતો જોઈ શકો છો?

- હા
- ના

24. શુ તમને પ્રોફેશનલ ડેવલોપમેન્ટ ટ્રેનિંગ થી સંતોષ છે?

- હા
- ના