

CHAPTER V
FINDINGS AND DISCUSSION

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5.0 Introduction

The previous chapter elaborated the analysis of the data collected from various sources. The study focused on the policies for professional development of teachers in terms of guidelines for teachers, professional standards and requirements, monitoring and appraisal system. Researcher studied the professional development programs in USA in terms of content, methodology, the perceptions of teachers and principals and the issues and challenges in managing the professional development programs.

5.1 Major Findings of the Study

The major finding of the study are drawn by analysing the national reports and documents pertaining to the policies on teacher professional development in USA collected by the researcher from the respective authorities of the school districts, school principals and from the websites of the US Department of Education; Data was also collected through the survey questionnaires administered to the teachers and principals, focused group discussions with the teachers, participant observation and the interviews that were conducted to understand the perceptions of teachers and principals on the various professional development programs.

5.1.1 Management of Professional Development of Teachers in USA

The management structures and functions with respect to professional development of teachers were studied by the researcher with a view to understand the relationship between the federal, state and the local government in USA. The structure and role of the federal government, state government, school district and schools are given in figure 5.1 as found from the study.

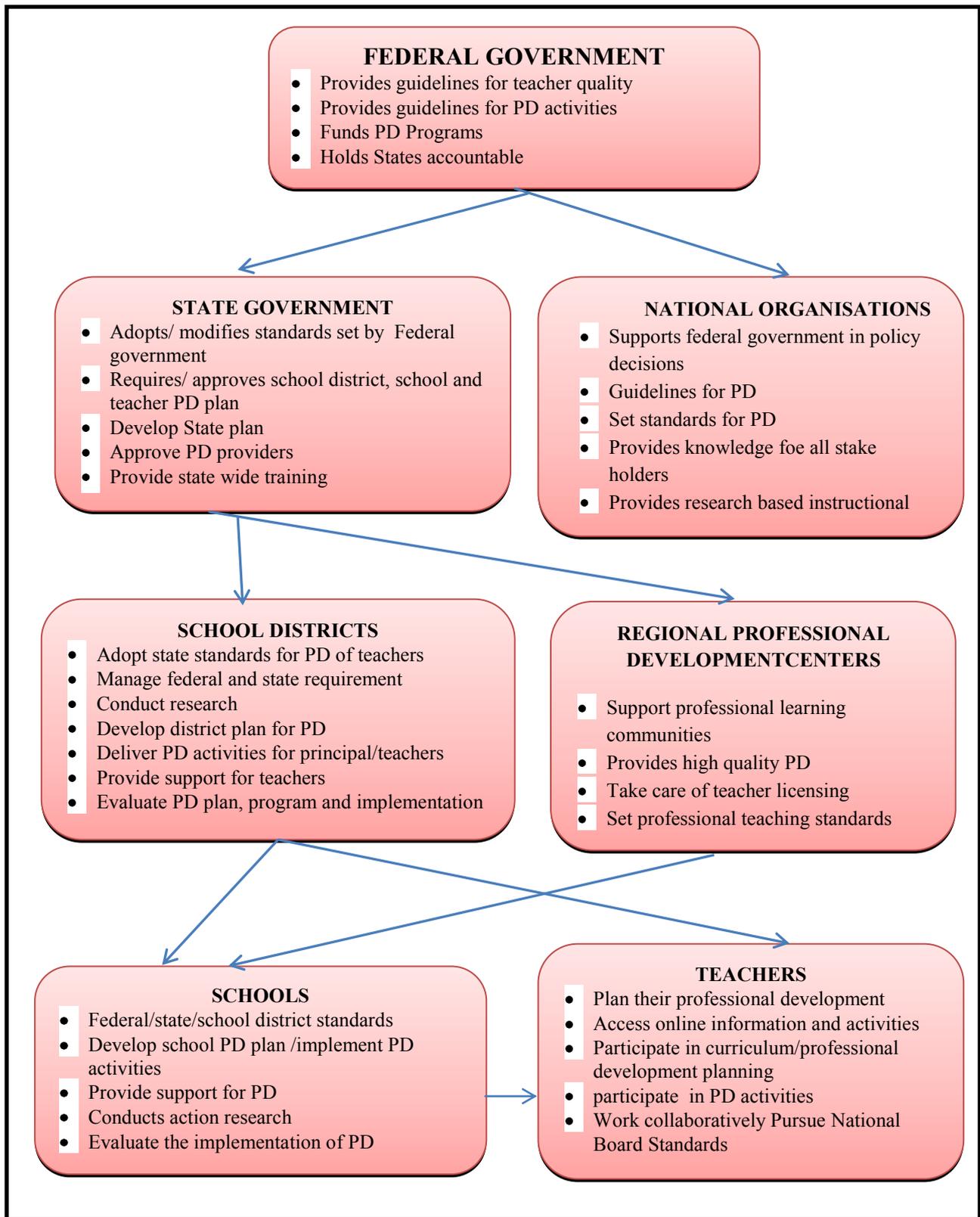


Figure 5.1 Management of Professional Development in USA

The relationship between the Federal, State and the local government pertaining to education may be described as the partnership in which each of the three

levels of government, at one time or another participate in varying ways and degrees in the establishment and support of education. The states work in partnership with the local school systems through its regional centers. The RPDC in Missouri, PTSB in New Jersey and PAILI in Pennsylvania support the professional learning communities and also provide professional development for the teachers. The states and school districts through their professional development committees under the supervision of director of professional development carry the activities effectively. Figure 5.2 shows the management system of professional development in the school districts.

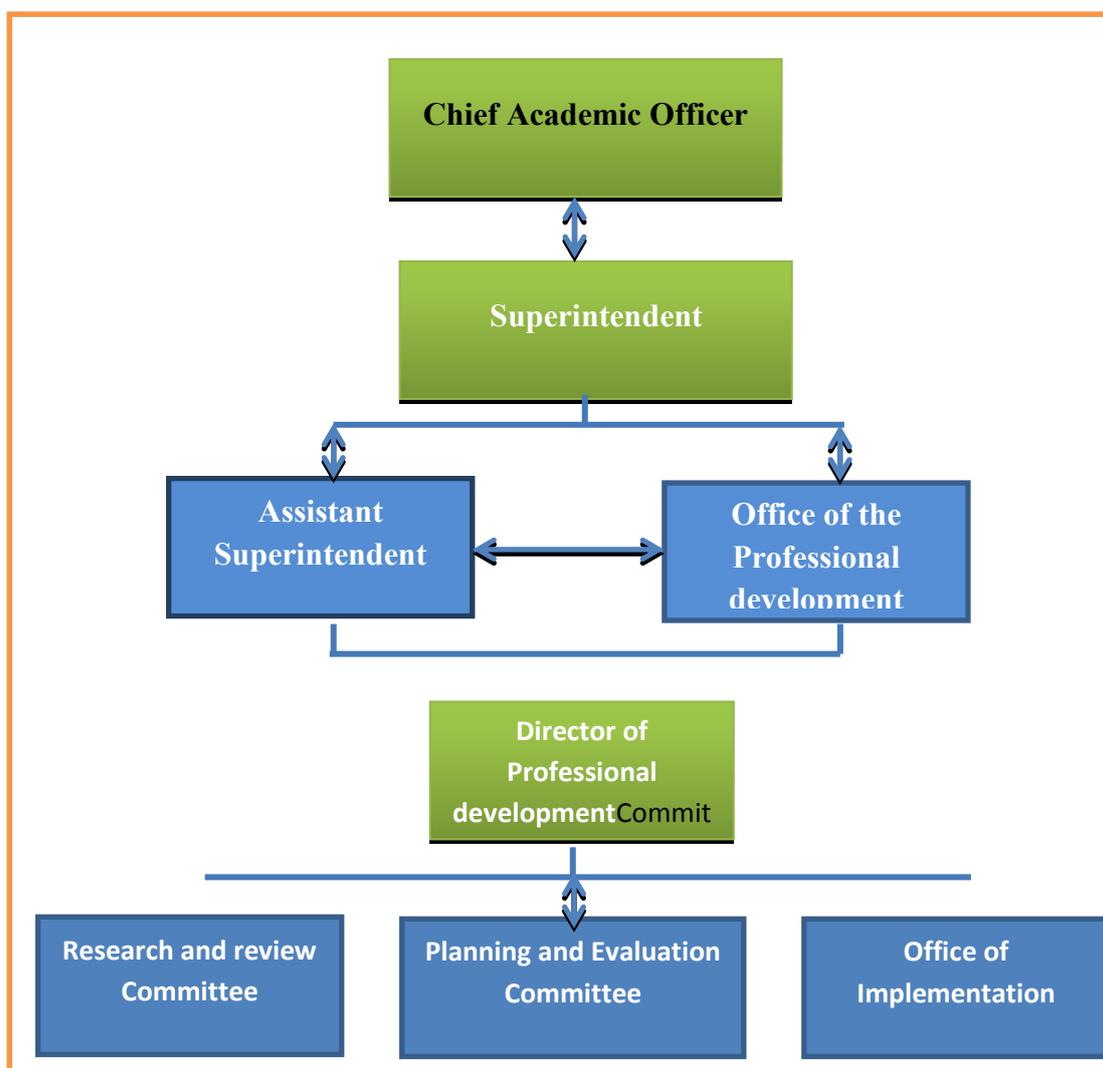


Figure 5.2 Local Management System of Professional Development

The management of the local school system is a two way linear hierarchy. The office of the professional development in the school districts has a director and

under the director research review committee, evaluation committee and the implementation committee works. The research proposals are reviewed, professional development planned, implemented and again reviewed by the local school system. They also work in collaboration with the schools.

The states and the school districts set policies for high quality professional development in alignment with the federal policies. The policies which were procured through different sources were analysed and the major findings of the study are presented as under the policy frame workfor professional development of teachers, professional development: opportunities and utilization below.

5.1.2 Policy Framework for Professional Development of Teachers

The findings of the study pertaining to the policies for professional development of teachers in USA are presented in four categories such as the relevance of the policies, standard for professional development mandated in the policies, implementation of the policies and the challenges in implementing the policies.

5.1.2.1 Relevance of the Policies

1. It was observed that the federal government, except funding for schools have limited involvement with local schools and leave the responsibility of public education to the individual states. States create academic standards and assessed student progress but do not held accountable by the federal government. It was also found that the NCLBA (2001), brought a significant shift in the federal role with regard to teachers.Federal government now is demanding the student achievement records and also the teacher professional development for student achievement. Federal government will decide the funding for the states depending upon the AYP of the schools.
2. It was found that NCLBA requires that all states to ensure 'high quality' professional development that are sustained, intensive and classroom-focused and have positive and lasting impact on classroom instruction and teachers' performance in the classroom for all teachers.
3. It was found that NCLBA policies mandated that professional development programs must increase teachers' knowledge of core

academic subjects; are standards-aligned; classroom-focused and improve classroom management skills.

4. It was found that professional development workshops/or conferences have to be at least for a minimum of three full days programs for its acceptance as professional development activity and one-day or short-term workshops and/or conferences were not accepted as professional development programs.
5. It was observed that the teachers have the liberty to choose the programs conducted by the state, school districts and other agencies.

5.1.2.2 Standards Set for Programs

1. It was found that the federal government through NCLBA has set standards and requirements for teacher qualification and professional development.
2. It was observed that organisations such as the NSDC have been associated with the federal government for teachers' professional development. NSDC also specified standards for teacher professional development on context, process and content.
3. It was found that the NCLBA mandates teachers to be proficient in their subject knowledge and they also understand how much of that to be taught to their students.
4. The study revealed that in New Jersey, the State has established a Professional Teaching Standard Board (PTSB) comprising of teachers, school administrators, local board education members, higher education community as well as state residents for managing and monitoring the standards of the professional development programs of teachers. Researcher could not find such an organisation in other states under study.
5. It was found that the teachers fulfilled the educational and professional qualification and standards set by the government (Standards set through NCLBA). They had rich professional experience.

5.1.2.3 Standards set for Licensure of Teachers

From the documents procured by the researcher it was found that the teaching licensure system exists in USA.

1. It was observed that in all the States and the federal districts of USA, the teachers, teaching in the public school possess licensure to teach. A majority of the teachers in the charter schools and private schools fulfilled the essential qualifications of being highly qualified teachers laid down by the government for charter schools and private schools, but had no teaching licensure.
2. It was found that states were concentrating on teacher licensure and the requirement for licensure varies by state.
3. It was found that with respect to NCLBA that teachers have to demonstrate satisfactory teaching performance over an extended period (one year in case of New Jersey) in order to obtain a provisional license, in addition to passing an examination in their subject area, apart from the professional qualification.
4. All the states under study have now abandoned the “life time” credentials of licensure and the licence needs to be renewed, once in three to five years (Missouri 4 years, New Jersey and the District of Columbia 3 years, Pennsylvania 5 years) depending on the states.
5. It was observed that the teachers need certain number of credit hours (100 hours in New Jersey; 180 hours in Pennsylvania) to renew their license from the professional development programs or college courses.
6. It was found that a performance-based system for licensure is being followed in the State of Missouri.
7. It was observed that the universities have to establish school-based teacher training programs for paraprofessional staff leading to their certification and licensure.
8. The study revealed that the states offer alternative licensure programs for teachers who change their career to teaching from other careers.
9. It was found from the study that states have reciprocity agreements that make it easier for teachers licensed in one state to become licensed in another state.

10. It was found from the study that for teachers who migrate to USA, and join the teaching profession from different countries, the number of years of teaching experience in their country was taken into considerations. However these teachers have to procure a teaching license within a specified time (3 years in Pennsylvania and New Jersey) or their contracts were cancelled.

5.1.2.4 Implementation of Policies

1. It was found that the state of Missouri has established Regional Professional Development Centres through which the professional developments of teachers pertaining to licensure and needs based programs are carried out. The state policies of Missouri focus on the lowest performing schools.
2. It was found that the in the state of New Jersey PTSB also conducts the professional development programs for the teachers.

5.1.2.5 Issues and Challenges

1. It was found that according to the NCLBA the teachers were striving to achieve the new federal requirements of being ‘highly qualified’ by demonstrating high quality learning opportunities in the classroom. This increasing teachers’ role poses challenges to the schools.
2. It was found that the school districts uses data analysis of teachers’ survey to evaluate which professional development program works best for specific teachers and designs the programs accordingly. However it is challenging for the districts to use the data management system in linking teacher’s performance and student achievement.
3. It was found that the administrators in the school districts, through the multiple accountability system, is able to achieve in finding how effective professional development is in helping teachers to improve classroom practice and the degree to which professional development content strategies were integrated into classroom practices, though it is challenging.

5. It was found that at all levels (federal, state, school districts, schools and teachers) each personnel have an opportunity to design, participate in professional development program. However each faces the challenge of aligning professional practice in the classroom with policy and research.

5.1.3 Professional Development of Teachers: Opportunities and Utilization

The findings from the questionnaires for teachers and principals, the interviews of the principals and the directors of professional development of school districts and focused group discussions with teachers, revealed the perception of the teachers, principals and the professional development directors. The findings of the analysis are presented in six categories such as the nature of the program, the program implementation, the evaluation of the program, impact of the program, incentives for participation in the programs and the issues and challenges in implementing the professional development programs.

5.1.3.1 Nature of Professional Development Programs

1. It was found that the professional development programs were basically needs based and were planned on the basis of the continuous reviews from multiple sources.
2. The study revealed that the focus of the professional development programs were to update the content knowledge and pedagogy of the teachers in the subjects of mathematics and science, the evaluation patterns for assessing students and also to help teachers to teach diverse and ethnic group of students.
3. It was found that the professional development programs organised by the school districts focused on the use of digital technology and use of webinars.
4. It was observed that the focus of professional development programs for the beginning teachers were for classroom management and evaluation practices.
5. It was found that the professional development programs organised by the schools were for differential instruction, leadership programs.

6. It was found that the federal government funds many professional development programs through the policy mandated in NCLBA for teacher training to support the teachers in their professional development plan and do not conduct many professional development programs.

5.1.3.2 The Execution of the Programs

The findings of the execution of the program have been presented under planning of the program and implementation of the program.

5.1.3.2.1 Planning of the Programs

1. It was observed that the professional development programs were planned by a committee comprising of the Superintendent of School Education, professional development directors of the school districts, educators from the office of the professional development, school principals, teachers, parents and civic administrators.
2. It was revealed from the study that the districts have researched and the policies and programs were set for professional development. The districts have given autonomy to school based professional development. The schools and districts professional development committees permit opportunities for teachers to participate in the planning of professional development.
3. It was found that the professional development programs were planned a year ahead from the results of the action research conducted by school teachers; the needs assessment surveys administered to the teachers by the school districts; the research conducted by the universities to find the effectiveness of the programs; the findings from the evaluation of the implementation of the programs; the feedback by the school principals and the mentor teachers and the data from the school test scores.
5. From the study it was found that school principals plan professional development programs based primarily on their teachers' needs and student test scores; the schools' plan provide adequate time for professional development on school sites, year round.

6. It was found that the teachers' self-directed plan for the type of professional development programs needed for them helped them in their personal growth.
7. The study also revealed that the subject teachers met once in a week to discuss student achievement and also discuss the areas in which the teachers need improvement to increase student achievement. The training for which is given in the school by the principal, supervisor or the head of the department.
8. It was found from the study that the colleges of teacher education in the respective states also design and conduct short term courses for teachers in content, pedagogic and managerial competencies.
9. It was opined by the director of professional development of the SDP, thatPAILI supports mentoring and a train-the-trainer component designed to create education leaders at all levels to improve student achievement across the state. The programs are delivered through regular, expert-facilitated convening / workshops in the region.

5.1.3.2.2 Implementation of the Programs

1. It was observed that the programs were conducted by the school districts in the beginning of the year and on the specified professional development days.
2. It was observed that the state programs were conducted in the vacation time. The school based programs were on going.
3. It was found that the content of the program was discussed with the principal and the head of the departments before implementation of the programs.
4. The implementation of the program was routinely observed by principal, supervisors, mentors and the school district officials.
5. It was found from the teachers' perception that they also undergo training programs conducted by the state government through the National Association of School Teachers, during the school vacations and also by other professional development providers.

5.1.3.3 Evaluation of the programs

It was found from the study that a comprehensive system of evaluation exists in USA.

1. It was opined by the teachers that, the principal, the coordinators and the mentor teachers observe the teachers in their classroom for the implementation and impact to learners. The feedback was given to teachers on a regular basis either personally or through electronic mails. Teachers' performances were also discussed in the staff meetings and during one to one discussions.
2. It was observed that the supervisors and the mentors observe the beginning teachers in the schools and send their reports of observation directly to the school district officials.
3. It was revealed from the study that the school districts evaluate the effectiveness of the program by visiting and observing the teachers classroom practices.
4. It was found that the officials of the school districts in collaboration with the school principals provided feedback and helped the teachers to improve on their performance. After a gap of 3 months they were again evaluated.
5. It was found that the school principals and the mentor teachers were given training, separately for the evaluation and implementation of the professional development programs.

5.1.3.4 Impact/ Effect of the Programs

The perceptions of the teachers regarding the implementation and the impact of the programs for teaching-learning were collected and the findings are presented here.

1. Teachers opined that professional development programs conducted by the districts and by the schools were effective and improved their content knowledge as they were needs based.

2. Teachers opined that the programs also provided opportunities to learn research based teaching methodology and effective use of technology in the classrooms.
3. Teachers opined that the programs provided opportunities to teach ethnic group of students and had a lasting impact on classroom teaching.
4. Teachers opined that the programs facilitated in teacher growth and development. It was also opined that the professional development programs had an impact on their personal appraisal.
5. It was found from the study that the professional development activities were regularly evaluated for their impact on increased teacher effectiveness as measured from the improved student academic achievement.
6. Teachers opined that participation in the programs helped them in the career advancement as supervisors and in administrative positions.

Teachers opined that the effectiveness of the professional development programs depends on the content taught which can be connected to the classroom and which can support teachers in bringing the best from the students, and also on the resource person. A few of the effective programs are presented here.

1. The teachers opined that the resource person who steered subject specific content program on US History was the most successful teacher with years of experience and was very focused and targeted. The methodology was role model and it was very supportive for teaching learning in the classroom.
2. The study revealed that the teaching and curriculum program organised by the state was highly regarded by the teachers. The process included performance-based assessment of teaching portfolios, student achievement as well as analysis of classroom observations. Teachers opined that though it was a lengthy and intense process, the professional development experience deepened their content knowledge and improved their classroom instruction and the process made them better teachers.

3. It was observed from the study that teachers who attended the technology development programs opined that they had a wonderful experience. The resource persons used the train- the trainer model which helped the participating teachers to train their peers in the school. Teachers opined that the collaborative learning and group working also provided them opportunities to learn more.
4. It was opined by the teachers who attended the Mathematics program organised by the federal government that their skills in posing complex problems to the students improved. They were able to encourage the students to use different methods of solving problems better than teachers who were not present in the workshop who used the traditional methods. It was opined by the teachers that the student achievement was considerably higher.

5.1.3.5 Incentives for Participation in Professional Development Programs

Researcher has studied from the survey for teachers and discussions with principals and professional development directors the incentives offered to teachers for participation in professional development programs.

1. Teachers opined that credit hours were given for participation in the professional development program conducted by the schools was beneficial.
2. Teachers opined that reimbursement facilities and payment of stipends were available for teachers for participation in professional development program but it was not sufficient for them in participating professional development activities. Teachers were given sabbatical leave to attend college courses and for exchange programs.
3. Teachers opined that participation in the professional development programs facilitated in their growth credit and also the school districts accredited the programs.

5.1.3.6 Issues/Challenges

1. The teachers opined that they needed more programs to update the latest technology. The experienced teachers opined that they need more content knowledge programs.

2. Teachers opined that they require more assistance and coaching in action research projects.
3. It was found that the major challenge for the teachers was adequate time and managing the school days to attend more programs though student free days and time off from work were given.
4. It was opined by the beginning teachers that they had difficulties in implementing what was learnt in the professional development programs, as the mentors were not aware of what was taught in the programs.
5. Teachers opined that plentiful opportunities were given to participate in professional development programs however prior family commitments pose problems to attend the programs.
6. The principals opined that time and teacher mobility was the biggest challenge.
7. The principals opined that finding professional development programs relevant to all teachers was a challenge but the schools were able to achieve the task of differentiated programs for individual teachers through mentors, supervisors and departmental heads.

5.1.4 Key Components Emerging from the Study

It was observed from the above major findings of the study that the effectiveness of the professional development programs was due to certain key components. The following key components emerged from the study and are discussed below:

5.1.4.1. Leadership and Management of Professional Development

The study revealed that the leadership role played by the principals of the school have greater impact on teacher professional development. The school principals were focused on school improvement and student achievement. The decentralized management system has helped in improving the student achievement rates drastically in the past 10 years in two (New Jersey and Missouri) of the four states under study. It was found that the decision making on professional development and other school improvement policies are shared among the teaching community. In these states the leadership by state agencies

in guidance and oversight also played a crucial role in high levels of professional activity. The student learning outcomes and teachers' professional needs are analysed at school level and principals encourage the teachers' to attend professional development programs to meet the school goal. It was observed that the principals do participate in professional development programs to exercise their leadership in curriculum, instruction and related areas. The principals opined that if professional development has to make a difference it must be embedded within a comprehensive system which reports teachers learning and work and must be connected to content standards and supported by reflective inquiry. Principals opined that to deliver their specific roles and responsibilities, they also need professional development. It was found that principals are also directed by his/her supervisor for principals' professional development. The school principals build a culture of commitment, collegiality, mutual respect and stability in the school. They create professional norms which include peer support, collaboration, shared responsibility and continuous learning of the teachers.

5.1.4.2. Multiple Accountability System

It was found from the study that NCLBA has mandated schools and school districts and states to set standards of accountability of teachers and the school improvement and send the same to the federal government. Depending upon student achievement the allocation of funds for schools by the federal government will be released. This has made states to create multiple accountability system for professional development at local level to ensure changes in teacher practices and student achievement. The school committees through surveys, teacher satisfaction levels ensure the accountability of teachers. The different policies together made a system and mechanisms for enforcing, monitoring and enabling links between teacher professional development and student achievement. The administrators of the school districts hold all stake holders in the system accountable for student learning. The superintendent expects excellence by all, monitors professional development programs, and teachers' performances and provides feedback to the staff in the districts office and school principals. The school districts have clear

expectations for instruction and apply pressure on schools for improved student learning. This expectation makes school districts and schools to address issues such as ineffective teachers.

The districts pay close attention to classroom practice, monitor instruction, curriculum and changes in instructional practices. The districts provide guidance for improving teaching and learning and this effort require actions such as system wide approval, interventions and corrective instructions and tutoring.

5.1.4.3. Monitoring and Supervision

It was found that three of the four states under study have established system for monitoring both participation in professional development and the quality of professional development. Missouri monitors both district usage of funds for professional development and the quality of professional development offered to teachers. Teachers' satisfaction levels for participating in selected professional development programs and the relationship between professional development initiatives and student achievement rates are taken as indicators of quality. New Jersey's PTSB review district professional development plans by administering NSDC's Standards Assessment Inventory which assesses the school professional development practices in comparison with NSDC professional development standards. In Pennsylvania, the local professional development committees (School District) plan development of individual teachers and examine the strategies and outcomes of professional development.

By defining standards, conditions and contexts for the professional learning, the regional professional centres govern the planning, development and delivery of professional development.

5.1.4.4. Academic Net Working with Private Partners

It was revealed from the study that the states have partnered with professional development providers to support on specific subject areas to foster innovative professional development since districts and schools have limited resources.

It was found that through a transformative approach regional networks are supporting the school in professional development and classroom management. New Jersey has created structures and standards for reflective and

collaborative professional development work through the PTSB which is comprised mainly of teachers /educators and local personnel. The schools in New Jersey have created school level committees to follow the state professional development content standards. RPDC in Missouri provides and supports high quality teaching through professional development. It was found that two of the four states under study have encouraged innovative professional development networks that controls and connect the professional learning groups and organisations with the schools. Educational Information and Resource Centre(EIRC) in New Jersey, also provide assistance to schools.

5.1.4.5. Adopting Alternative Professional Learning Community Models

The study revealed that states have evolved a school-based Professional Learning Communities (PLC) and teams which focus on professional development and school improvement. The states do not compel all the schools to have the PLCs. It was found that Missouri DESE offers on-going training to support for the PLCs through RPDC.

The professional development communities' in New Jersey plans for professional development plans aligned with state standards and individuals teacher needs. They also evaluate the quality of continuing education.

It was found that educators from universities work with a knowledgeable teacher from the school or from another school with an expert from education service centre or with education consultants forms professional learning teams (PLTs). PLTs work with teachers' and school leader's to understand the instructional gaps in students' learning. Then the PLTs determine what type of professional development is needed to help close those gaps. The teams work as long as the members have a mutual learning. The school leaders and the school districts observe the teachers and if their observation indicates teachers need to learn more another round of professional development is conducted.

5.2 Discussion

Professional development of teachers is very important in student achievement. Knowing the content, understanding how students learn and practising effective teaching methods leads to student achievement. The teacher needs to be well

prepared from the beginning of their career and continue to impart their skills throughout their career. Over the past thirty years, professional development has evolved from individual initiative in which teachers took college courses or attended seminars by organisations, to a state and district effort. States and districts strategically link professional development of teachers to goals for teaching and learning. It is evident from the study that the four states, the school districts and schools carry out research over professional development and this has influenced their policies, planning and programs.

The professional development has been pushed more towards school-based autonomy by the policies. District wise committees permit opportunities for teachers to participate in the planning of staff development activities. Pupil free days and late start days provide teachers with blocks of time during the school year for planning and participation in professional development programs. Thus it is evident from the study that professional development is considered vital for teacher development in the USA. The researcher has tried to integrate and discuss the information gathered through, document analysis; survey administered to teachers and principals, interviews with the principals and the professional development directors of the school districts and the focus group discussions with the teachers.

Researcher analysed the policies for teacher professional development in terms of relevance, standards, implementation and challenges from the documents procured through different sources and the major findings are discussed below.

It was found that the standards set by NCLBA of the Federal government for teachers to be highly qualified to provide roadmap for quality professional development. The NCLBA and the NSDC's staff development standards provide a strong foundation upon which a district's professional development programs are built. The standards set by the state and school districts provide vision and guidance in developing professional development programs. Professional development director of the school districts, the school principals and the teachers reflected that the teachers in all schools have access to professional development appropriate to their need and responsibilities. This illustrates that teachers require professional development programs for

their professional growth and so they plan their activity. The state education department and the school districts provide guidelines for the policies, the professional standards and requirements and credit hours required by individuals for the renewal of licensure. The NSDC's goals for context, content and process standards of professional development are aligned with those of the states and school districts are of great support to the districts. The NSDC's Context Standard professional development programs not only improved the learning of all students but also organised the adults into lifelong learning communities. These data supports in understanding the relevance of policy integration in quality professional development.

The study revealed that the states have directed the school districts to focus their attention to purpose, content, form and quality of professional development. This was evident from the content specific need based programs offered by the school districts. The study found that the federal government through NCLBA and the NSDC has set standards and requirements for the teachers' educational qualifications and the professional development requirements. The NCLBA mandated that the teachers be proficient in their content knowledge of the subjects they teach and also understand how much to teach their students. The AYP of the students indicated the teachers' proficiency which is linked to teachers' educational and professional standards.

The results of the study indicated that licensure is compulsory for teachers in all states. According to the NCLBA mandates, the teachers have to demonstrate satisfactory teaching performance over an extended period in order to obtain a provisional license, in addition to passing a subject competency exam. This is in addition to their professional qualifications. The federal government observed that the 'life- long licensure' halts the teachers' continuous learning and so the life- long licensure procedure is removed in the states.

The NCLBA mandates all certified teachers to acquire a certain number of credit hours (e.g. 180 hours in a five year period in Pennsylvania) and be 'highly qualified'. It has also specified that the teachers should participate in quality professional development programs. The states and the school districts provide guidelines to the teachers for the type of professional development programs the

individual teachers need to take for maintaining and renewing the licensure. The states data system maintains the licensure procedures and informs the individual teachers' about the status of licensure. The teachers who change their career to teaching from other careers have alternative licensure programs. These teachers' need to take special course work and test conducted by the universities and schools to procure their licensure. The development of the teachers helps the districts to overcome the shortage of teachers in the particular subjects. Teachers are given guidance and provided support in developing individual professional development plans, so teachers can no longer function as independent contractors within a school district. The requirement of licensure has set the teachers in the lifelong learning process and also quality professional development programs.

U.S government acknowledges the vital role that teachers have in imparting knowledge and skills to young people and that in terms of student achievement, the teacher is a more significant factor than any other kind of school resources.

The federal government through its funds provide facilities for enhancing the teaching learning process in the classrooms, as the teachers are expected to demonstrate high quality learning opportunities in the classroom to be "highly qualified" teachers. Accordingly, the programs are developed jointly by the administrators, principals, teachers and parents. The focus of the programs is to improve the content knowledge and pedagogy of the teachers. The thrust areas of the programs are content knowledge in the subjects of mathematics and science methodology and evaluation programs.

At each stage, teachers need different types of programs. The novice teachers require classroom management and evaluation patterns; the middle year teachers requires technology integration and the experienced teachers requires content specific programs. Each individual teachers needs are fulfilled by the different types of programs organised by the school districts and schools.

In two states under study, the types of professional development programs are planned by a committee comprising of all the stakeholders of the school and the local community.

It was found that the planning of the programs is a long process. Planning for the forthcoming year (2013-14) starts from the present (2012- 13) year. The planning is based on the results of the action research conducted by the teachers, the needs assessments surveys administered by the school districts; the data from other researches are collected and analysed and the teachers' individual needs are identified; the school districts through their data analysis also are able to find out which professional development program best works for specific teachers and help them to design the program. Based on this multiple source of information, the professional development programs are planned. The elaborate system of planning and execution of the professional development programs ensures the development teachers as professionals and in their personal growth. The principals, supervisors, head of the departments and the teachers plan for the school based professional development programs. The schools have student free days, daily block times, and once a week subject teacher meetings for professional development programs.

The study results indicated that emphasis has been placed on providing professional development which is research-based. For the professional development programs the districts and schools use multiple sources of data such as student performance data, teacher surveys, observation of teaching learning. These findings confirm the previous studies which address the importance of student data to focus for professional development (Fisherman et al., 2003; Guskey, 2003). This relates to the National Staff Development Council's process standards which state that professional development that improves learning of all students uses disaggregated data to determine adult learning and "uses multiple sources of information to guide improvement and demonstrate its impact".

According to the study results, the teachers opined that school faculties have administrative support to arrange appropriate professional development activities that address their individual needs. This finding is consistent with the national study (Garet et al., 2001) which revealed that nearly 70% of the teachers across the nation choose their own professional development activities.

The professional development programs are not only conducted by the schools and school districts the colleges of education are also responsible in preparing subject specific content knowledge course work and pedagogical programs for the teachers. The national organisation such as NSDC, NCES, NBPTE, NAST, NAMT, AMNS and NJSPDS are also identified as professional development providers and they organise quality professional development programs for teachers.

It was found from the study that a comprehensive, systematic monitoring and evaluation system prevails in USA. At the beginning of the year the teachers were informed about the process of evaluation and the official days of classroom observation were given to the teachers. The school principals, supervisors and the mentor teachers are given training for evaluating the implementation of the program. It was found from the interviews with the principals, the focused group discussions with the teachers and the participant observation of professional development programs that either the supervisors, head of the departments or the principal participate in the same program and observe the teachers in their classroom for the implementation of the program and the impact on the learners. The observations are conducted both formally and informally. The schedule of the observations were; minimum of 10 observations per week by the principal and the Asst. Principal; more than 10 observations by the Teacher Learner Facilitator. The principal, supervisor and the head of the departments meet once in a week and discusses about the evaluation. Feedbacks were given to teachers through emails, and one to one discussions. The school districts officials also observe the teachers both formally and informally. Feed backs are given to the teachers immediately. The feedback given helped the teachers to improve themselves. The resource persons are available to facilitate the teachers whenever needed.

The beginning teachers are observed continuously by the mentors. The mentor teachers send their observation of the beginning teachers directly to the school districts. The school districts administrators also observe the beginning teachers. If basic proficiency was lacking after 2 years, a warning is given and they are asked to follow the rubrics given at the beginning of their career. The school

districts did not retain teachers who do not achieve the required proficiency after 3 years.

The teachers opined that the professional development programs conducted by the school districts and the schools were effective and improved their content knowledge, research based pedagogy and effective use of technology. The programs provided opportunities for sharing good practices with their peers. The programs helped them in their growth and personal appraisal. A significant majority of the respondents believe specific and appropriate support is available to teachers who are new to teaching or new to their positions and support is available to teachers experiencing difficulties. High percentage of survey respondents believed that professional development activities focus on acquisition of new knowledge and skills about subject content that students are expected to learn. These findings relate to the content standard set by NSDC which states that “staff development that improves the learning of all students deepens educators’ content knowledge, provides them with research-based instructional strategies to assist students in meeting the academic standards, and prepare them to use various types of classroom assessments appropriately.”

The participation in the programs helped teachers in carrier advancement as supervisors and administrators. Reimbursement facilities for participation in conferences and workshops helped in improving their personal and professional growth. The sabbatical leave provided them opportunities to undertake college courses and exchange programs. Financial incentives encourage and support schools to participate in action research projects. The findings of the action researches are communicated to other schools and exchange of good practices takes place.

Teachers require professional development programs not only for procuring credits for renewal of licensure but also for improving the learners. Teachers needed more programs in technology to upgrade their knowledge. Teachers needed more financial assistance to participate in professional development programs. Though the teachers are given freedom to choose the type of professional development programs and plentiful opportunities are provided family commitments pose problems for the teachers in participation. The

principals opined that time and teacher mobility poses problems for the schools. Finding professional development programs relevant to individual teachers is challenging for the principals and the school administrators.

However the schools are trying to overcome this by appointing mentors, supervisors and departmental heads to cater to the individual needs of the teachers. The other challenge is that the involvement of teachers in the teachers' union possesses problems for the administrators to take any action. Teachers require technical assistance in developing action research project. Federal government in the recent years have started funding for schools for action research programs. It is necessary to provide assistance in capacity building at the state, school districts and school level. The schools and districts professional development committees permit opportunities for teacher to participate in the planning of professional development.

From the above discussion it is obvious that in the global era, professional development of teachers has been given prime importance in USA. The factors responsible for this development are the community needs and accountability of the schools to the stake holders. The educators and the administrators of the US government believe that developing a teacher is more important than training a teacher for the national growth. The educational administration is both centralised and decentralized. The professional development of teachers is both governmental and school based on content, pedagogy and psychological based. The professional development programs offered to teachers are need based and involve input from the teachers. The programs are evaluated for their quality and for its effectiveness. The professional development programs help teachers to grow as individuals and as professionals.

The findings of the study are relevant to draw implications for the professional development of school teachers in India

5.3 Implications of the Study to the Indian context

The findings of the study are relevant to draw implications for the professional development of school teachers in India. Professional development or in-service training of teachers is not a new concept in India. Professional development or the in-service of teachers is not a new concept in India. There have been many

commissions set up for the in-service training of teachers and recommendations have been given by them from before India became a democratic republic. The Sargent report of 1944, University Education commission of 1949, Secondary Education Commission of 1953, Program of Action 1992, National curriculum framework 2005, National curriculum Framework for Teacher Education 2009 has given recommendations for the in-service training of teachers. Some of the recommendations have been implemented. Nevertheless the present education system of India is still not adequate for the needs of the people of an emerging and developing country. It needs to develop the students of the present for the future globalised world. This requires the development of the teachers. Teacher performance is the most crucial input in the field of education. India is on the threshold of the development of new technologies likely to revolutionize teaching in classrooms. There are great reform expectations for students to meet the global challenges. Consequently these reforms efforts expect the teachers to master new skills and responsibilities. Teachers need to play many roles in the schools; teachers need to expand and deepen their content knowledge and new teaching methodologies; teachers need time and opportunities to develop new approaches to working with students. All these activities need a well-designed and organized professional development. Educators and policy makers have felt the importance of in-service education for improving the quality of classroom instruction as well as the professional growth of teachers in the secondary schools of India. However the periodic orientation of the teachers does not seem to have been examined and evaluation of the program conducted has been very few. The accountability of teachers, their professional conduct and functioning would also increase if policy implementations, the professional development programs were evaluated. The policy makers and the educators need to review the policies and the programs in developed countries and a training policy needs to be worked out, defining parameters such as the periodicity, context and methodology of programs. The present study was conducted to understand the policies and programs for teacher professional development in USA and draw implications to India, keeping in view the present scenario of professional development in India. The key implications drawn from the study and are discussed below.

The federal government of USA through NCLBA has recommended policy guidelines for the professional development of teachers in USA. All the state governments, the school districts (similar to the District Education Office in India) and schools set their own policies in accordance with NCLBA for high quality professional development. In India MHRD, NCTE has laid down norms, standards and guidelines for programs of continuing education and professional development of teachers.

The different committees set up by the government of India, have given recommendations for teaching license.

The Committee on NPE reported that the teacher is also a professional like any other professional such as doctor, engineer or lawyer. One has to update the knowledge and skills to qualify and remain as professionals. It recommended the licensure system and also that it is essential for teachers to undergo in-service training once in five years. In the event of refusal to upgrade the knowledge the teaching license had to be withdrawn.

The committee also recommended the 'Internship Model' of training, because the conventional model of pre/in-service training is not adequate for the present globalized requirement of teachers. The present model only trains the teacher and does not develop the teacher.

The trainee teachers should be attach to schools and under the supervision of the experienced and skilled teachers the trainees should be developed, Only after 3-5 years a trainee will be certified on the basis of the continuous evaluation by the supervisors and senior teachers of the schools.

From the study it was noted that all the states in USA and the federal district licensure is compulsory and renewal of the licensure is through the credit hours procured from professional development activities. Life-long teaching licensure has been withdrawn in most of the states in USA. The researcher could draw relevance from the study for policy framework for India and are discussed below:

1. Government funding for education in India need to target on the training and development of teachers. The allocation of funds by the central

government for the professional development programs has to be based on student achievement.

2. States and districts to ensure 'high quality' programs which are classroom focused and have positive and lasting impact on classroom instruction; performance of teachers in the classroom and increase teachers' knowledge of the core academic subject.
3. The workshops/conferences duration have to be more than a day and need time for reflection and feedback.
4. Emphasis has to be given to NCF 2005, which states that, the curriculum renewal efforts to be supported by well thought –out and systematic professional development programs and school based teacher support.
5. Teacher education institutions need to be held accountable for the quality of their graduates; these institutions need to take steps to strengthen both their pre-service and in-service programs.
6. National Council for Teacher Education needs to think of setting National Board for Professional Teaching Standards or National Council on Teacher Quality, to ensure that all teachers are highly qualified and continuously developed throughout their teaching career.
7. Teacher licensure system to be formulated as recommended by NPE in India, so that the accountability of teachers can be maintained.
8. The present study underlined the scope for improving the Teacher Eligibility test conducted by the The Central Board of Secondary Education of India and some of the State Boards of Education. Now the school boards require teachers to have a bachelor's degree and to have completed an approved teacher training program as well as supervised practice teaching. The policy makers need to emphasize this by providing a registered license number to the eligible teachers.
9. The License also needs to be renewed after 3 years or a certain number of years. For renewing the license, the teacher needs to obtain certain credits through professional development programs.

10. The teacher certification, tenure and renewal of license need to be the province of states and teacher professional development and evaluation of classroom teaching must be the domain of schools and school districts, in an effort to increase the likelihood that the teachers will be effective with their students.
11. Performance-based system for licensure has to be followed.
12. NCTE can use data management system to start the licensure system from the current year and allocate registered numbers to the candidates passing from the colleges of education.

The implications drawn from the study for professional development programs are discussed under:

1. The study emphasizes on the need for School district boards (District Education Offices) to organise research based teacher professional development programs for school teachers.
2. The focus of the professional development programs must be to update the content knowledge and pedagogy of the teachers in the subjects they teach, the evaluation patterns for assessing students and also to help teachers to teach diverse group of students.
3. The programs for beginning teachers must focus on classroom management and the present evaluation system. Mentor teachers to be assigned and given training along with the beginning teachers.
4. The programs must be based on specific pedagogical strategies related to curriculum which will be more beneficial for teachers in changing instructional practices.
5. The study revealed that programs that were based on specific pedagogical strategies related to curriculum were more beneficial for teachers in changing instructional practices.
6. The planning committee for managing and monitoring professional development must be comprised of teachers, school administrators, local educators, university educators as well as parents.

7. The school based programs must focus on the action research conducted by the teachers, student's achievement record and individual teacher needs. The schools' plans must provide adequate time for professional development on school sites, year round
8. The planning of the professional development programs for the coming year must be based on the data from the needs assessment surveys administered to the teachers by the district education office; the research conducted by the universities to find the effectiveness of the programs; the findings from the evaluation of the implementation of the programs; the feedback by the school principals and the mentor teachers and the data from the school test scores.
9. Time for staff meeting: According to the working hours of the school and the different roles the teachers are expected to play, time is a precious resource that is in high demand, but short in supply. The study revealed that in USA full time teachers have 5 periods a day and 2 preparation period. The schools can plan for block free periods during which time meeting of the teachers teaching the same subjects; the departmental meetings; the staff meeting, subject and curriculum meetings can take place. If parents were involved the meetings can be held in the evenings.
10. The colleges of teacher education in the respective states can also design and conduct short term courses for teachers in content, pedagogic and managerial competencies.
11. The district education offices can conduct the programs either in the beginning or the end of the academic year on specified professional days.
12. State and the Universities can organise programs during the vacation time.
13. The school programs must be on-going the year round.
14. Pupil free days: The study revealed that five to eight student-free days were given each year for professional development activities in USA. . The "pupil-free day" is a major devise for organising blocks of time for school-wide professional development activities.
15. In the Indian context the last working day of the month (half day for students) can be utilised for professional development activities.

16. Release time for (and substitute teacher coverage) for small teams of two can be given for attending seminar and conferences.

The present study underlined the scope for improving the evaluation and feedback of the professional development programs for the teachers:

1. The evaluation need to be the domain of the schools and the school district boards. Together they must give feedback to teachers.
2. Teachers to be observed in the classroom for the implementation of the professional development program by the principal, supervisors, and the authorities from the school district boards regularly and proper feedback to be given to them. The parameters on the observation can be given to the teachers.
3. The districts and boards should develop an evaluation model to determine the impact of professional development programs on student achievement.
4. A data based system must be maintained for the effects of the implementation and the evaluation of the programs.
5. The policies should focus on both formative and summative methods for evaluation. The feedback should be given to all the stake holders
6. Some Design Principles for Effective Teacher Evaluation Systems
 - All teachers should be evaluated annually.
 - Evaluations should be based on clear standards of instructional excellence that prioritize student learning.
 - Evaluations should consider multiple measures, with emphasis on a teacher's impact on student academic growth.
 - Evaluations should employ four to five rating levels.
 - Evaluations should encourage frequent observations and constructive critical feedback.
 - Evaluation outcomes must matter; evaluation data should be a major factor in key employment decisions.
7. Performance based pay for teachers which need to reward participation and implementation of the program and also student learning from that.

8. Credits for participation in professional development programs, college courses, attending workshops/conferences, exchange programs and sabbatical must be thought of.

Guiding principles for effective professional development programs which are drawn from the study are presented below:

1. If professional developments are closely linked to school initiatives it will have greater effect on practice. Site-based initiatives have to be stimulated and supported. These initiatives may be cost-effective ways to engage more teachers in serious PD activities and could promote the professionalization of teaching.
2. Good professional development programs should include child-development theory, curriculum content and design, instructional and assessment strategies for instilling higher-order competencies to meet the expectations educators hold for students.
3. Teachers need opportunities to explore, question and debate in order to integrate new ideas into their repertoires and their classroom practice. They must be intellectually engaged in their disciplines and work regularly with others in their field.
4. Teachers should be respected as professionals and as adult learners. Professional development should draw on the expertise of teachers varying degree of experience and cater to their needs.
5. Follow up support should be provided by resource persons and. PD should be viewed as an integral part of teachers work
6. Many models for the program planning and evaluation have been developed by educators. A professional development model can assists the program developers. Guskey and Sparks developed a model which illustrates the relationship between professional development and student achievement (Guskey, 2000). The model reflects the content, context and the process variables. The content in this model represents the knowledge and skills the teachers will gain. The process is the implementation of the program. Context talks about the trainees, and the time, place of training and why it is being done (Guskey, 2000).

7. NCLBA in USA allows states to create a High, Objective, Uniform State Standard of Evaluation (HOUSSE). The HOUSSE system is designed by each state. It can take into account teachers' experience, their participation in professional development, their leadership/service activities related to the academic subjects, or state evaluations of their performance. States can set up HOUSSE and one of the three approaches can be adopted for HOUSSE:
 - Professional development-teacher must complete a specific number of state-approved "continuing learning units" (CLUs).
 - Performance evaluation-States must use new system of evaluation which must observe the teacher in the classroom; and measure student achievement.
 - Point system/portfolio-Teacher can earn a specific number of points/credits for meeting the required criteria in several categories by submitting documentation that is reviewed by a trained evaluator or administrator. The categories can be years of successful classroom experience, participation in high-quality professional development, service on curriculum development teams, service as a mentor teacher, and other activities that are specifically related to knowledge in an academic area.
8. State Department of Education and the schools must have multiple accountability system for professional development to ensure changes in teacher practices and student achievement.
9. The school committees through surveys and teacher satisfaction levels must ensure the accountability of teachers.
10. A comprehensive mechanism must be developed for enforcing, monitoring and enabling links between teacher professional development and student achievement.
11. District education office must hold all the stake holders in the system accountable for student achievement.

12. Teacher education institutions need to be held accountable for the quality of their graduates; these institutions need to take steps to strengthen both their pre-service and in-service programs.
13. States to partner with private professional development providers to support for specific subject areas and innovative professional development.
14. Regional network of professional learning communities can be set up to support the schools and district offices,
15. The review of literature revealed that many researches have been conducted on evaluation of professional development program. A comprehensive evaluation of the long term impact of the programs on classroom instruction and student achievement exists in USA. This type of evaluation has provided professional development planners with information and guided them in development of future programs (Arter,2001; Fretchling,2001; Gordon,1991; Guskey,1994,1999,2000; Guskey& Sparks,1996; Killion,2002; Marks & Manniates,2003; Mollaer,1999; Murphy,2000; NCES,2001; NCREL, 1997; National Center on Secondary Education and Transition, NCSET,2005; Porter et al., 2000; Shaha et al.,2004).
16. A national study (Garet et al., 2001) revealed that teachers across the nation choose their own professional development activities. District staff primarily plans the professional development opportunities. The school district employ outside experts to conduct workshops and provide content-specific professional development for staff (Firestone, et al., 2005; Payne & Wolfson, 2000). A professional development committee or leadership team can be arranged in the school to plan activities and monitor the results of the professional development training. The committee may conduct a needs assessment to determine the needs of the individual teachers.
17. Workshops which were the most common type of professional development design which is defined as “a structural approach to professional development that occurs outside the teacher’s own

classroom” (Garet, et al., 2001, p920) and were opposed. Instead, more emphasis has to be placed for reform-oriented professional development programs such as mentoring and coaching.

5.4 Conclusion

A highly skilled and professional teaching force does, and will continue to make a difference. Quality education in schools in developed countries especially in United States of America is achieved by a comprehensive mechanism to update the knowledge and skills for teacher continuous professional development.

Teacher education and professional development in the USA has been influenced by the implementation of the No Child Left behind (NCLB) Act of 2001. NCLB contains a “teacher quality” component that mandates, that each teacher be “highly qualified” to teach the subjects they teach and recommended for continuous training and professional development of teachers.

The in-service education and continuous professional development of teachers has been given prime importance in the USA over the last two decades. The specific factors responsible for this development are: the certification laws, professional organizations, community needs, size of schools, nature of job opportunities and skills.

This chapter provided a summary of major findings of the study on the policies and programs for teacher professional development in USA. The perception of teachers, principals; and administrators on the policies, programs conducted by different agencies, impact of the programs and the issues and challenges are discussed in detail.

The study throws light on the teacher development, the policies for teacher professional development, the designing of the program and evaluation of the implementation of the professional development programs in United States of America. The present study contributed to the recommendations of NCF, 2005 which has recommended different strategies for the professional development of the teachers. Teachers, administrators, policy makers and researchers can take

some specific steps from this study to improve professional development in our schools.

The next Chapter provides the summary of the study and recommendations for further research.