CHAPTER II
THEORETICAL AND CONCEPTUAL FRAMEWORK OF RESEARCH

2.1 PROLOGUE

_I emphasize this - no matter how good or successful you are or how clever or crafty, your business and its future are in the hands of the people you hire._

_Akio Morita (Late) (Businessman and co-founder of Sony Corporation. Japan)_

The above quote sums up the importance of people in an organisation. People come first. Business plans can’t implement themselves, the hopeful entrepreneur behind the business plan is responsible for making sure it gets off the ground. Technology is managed by technocrats, Science explored by scientist, Geography by explorers and geologist. Thus behind every field and subject there are people at work. An organisation cannot build a good team of working professionals without good Human Resources. Companies create their success by focusing specifically on bringing together the right people. The ideas creativity & innovation comes from humans and it is important we nurture them and care for them.

Education is a process of human development and empowerment for the achievement of a better and higher quality of life. Students and teachers are the two most important human resources in the education sector. Educationists are thinking of school in terms of learning organisations by building the capacity of its individual members.

All organisations including schools, have untapped potential for creating their future. To tap that potential one requires developing one’s capacity. It is the key construct in creating the conditions within the school to enhance leading, teaching & learning; In other words developing its capacity as an organisation.
In order to meet the 21st century challenges of education schools need to transform into learning organisations where people continually expand their capacity to create the results they truly desire, where new & expansive patterns of thinking are nurtured, where collective aspiration is set free & where people are continually learning how to learn together. It is now clear that for school improvement, leadership needs to focus on two dimensions - The teaching-learning focus on the one hand & capacity to be reflective practitioners on the other. This calls for application of Organisational development – an industry concept into school systems too.

2.2. MEANING & FUNCTION OF ORGANIZATIONAL DEVELOPMENT (OD)

Organizational development is a defined methodology of looking at an organization from a holistic perspective with the intention of improving it.

OD is a planned and collaborative process for understanding, developing, and changing organizations to improve their health, effectiveness and wolf renewing capabilities (Warrick, 2005, p 172).

OD encompasses a diversity of concepts and methods for changing organizations. Organization development is a system-wide process of applying behavioral-science knowledge to the planned change and development of the strategies, design components, and processes that enable organizations to be effective. OD addresses an entire system, such as a team, department, or total organization. It also deals with relationships between a system and its environment as well as among the different features that comprise a system’s design. (Thomas Cummings 2004)

OD simply means: ‘Organization’ the coming together of people and resources to form a unit. ‘Development’ in its simplest form suggests change and growth. So OD is the practice of changing people and organizations for positive growth. It means it involves development of
resources that is physical and human. The physical development is technical and therefore easy but human development is complex and difficult. The human development needs thoughtful planning and implementation of strategies so as to enhance the competencies of people working in an organization.

The function of OD is:

- To assess the effects and relationships between people, processes and technology
- To proactively anticipate and successfully respond to change.

The main objectives of OD are to:

- Improve organisational performance as measured by profitability, market share, innovativeness, etc.
- Make organisations better adaptive to its environment which always keeps on changing.
- Make the members willing face organisational problems and contribute creative solutions to the organisational problems.
- Improve internal behaviour patterns such as interpersonal relations, intergroup relations, level of trust and support among the role players.
- Understand own self and others, openness and meaningful communication and involvement in planning for organisational development.

The question and challenge is how to bring about OD? The answer is simple, through OD interventions. Interventions are the set of structural activities in which selected organisational units, be it individual or their groups, are engaged with a task or a sequence of tasks. A number
of OD intervention methods exist. One way of classifying these methods, is by the target of change.

Some of the major OD interventions are:

- Career planning & development
- Culture change
- Goal setting
- Work design
- Training & Development etc.

Experts have applied OD interventions in schools and these generally fall in one of the following categories:

- Total quality management - leader initiated
- School based Management - formal alteration of school based structures
- Classroom interventions – teacher focused
- Individual focused interventions - targeted towards skill training, job design, role negotiation and career planning.

OD interventions lead to changes needed in the organisation vis-à-vis schools to reach its future goals. It helps in overall development. However it is important to remember that, “The achievements of an organisation are the results of the combined effort of each individual”
Thus, Human Resource is the backbone of an organisation, which is directly associated with the organisation’s effectiveness, efficiency and social image. This has forced the society to focus on human development. People work to generate synergies, interdependencies & efficiencies in an organisation. HR department practices in successful organisations are focussed on carefully nurturing employee learning & development so that their organisations survive & advance. They focus on developing competencies. The same is needed in the school education sector too. This theory holds true for the education sector too.

There are hardly any schools which have a full-fledged Human resource department working towards capacity building of Principals and teachers. A New York Times bestselling author, researcher, who says, “Historically we have looked at HR from a weakness prevention mode more than an excellence promotion perspective.” Human resource departments are a basic pre-requisite in any industry and yet in spite of the education sector having acquired this status, there is an absence of this important department. A sector that plays a crucial role of developing a country’s human capital lacks this vital department! Up till now this role was assumed to be looked after by the school Principal and/or Management. However this cannot hold good any longer. Human resource development requires special technical expertise and knowledge. To face the new challenges on the fronts of knowledge, technology and changing trends in global economy organisations need effective human resource management.

2.3 CONCEPTUAL DEVELOPMENT OF HUMAN RESOURCE PRACTICES

Human Resource practice means the process of increasing the capabilities of people (HR) through development. It is a process of adding values to individuals, teams, and organization as a human system.

According to American Society for Training and Development (ASTD),
"HRD is the integrated use of:-

- training and development,
- organizational development, and
- Career development to improve individual, group and organizational effectiveness.

The function of HR is to develop the key competencies that enable individuals in organizations to perform current and future jobs through planned learning activities. **Human Resources Development** is the improvement of skills, knowledge, and indirectly, the value of the employee in the organization. It is the responsibility of managers and Human Resource department.

Prof. Leonard Nadler formally introduced the concept of HRD in 1969 in a conference organised by the American society for training and development [ASTD]. Among the Indian experts T.V. Rao worked extensively on HRD and attempted to define HRD comprehensively. He viewed HRD from an organisational point of view and suggested that in HRD process, the employees of an organisation are motivated to acquire and develop various skills and capabilities, knowledge, etc. in order to contribute positively to the organisational group, individual and social goals.

Larson and Tubro was the first private sector company to introduce the concept of HRD in 1975 on the recommendations by two consultants’ Udai Pareek and T.V Rao from Indian institute of management, While BHEL – a company in public sector introduced the concept of HRD in 1980. Now it is found that many companies, organizations are giving due importance to the human resources development. Even leading business schools, universities, management institutions like IIM, Bajaj institute of management are organising management courses suitable to the needs of industries.
The need to enhance Human Resource Practices was and continues to be felt.

Upto the 1970’s manpower management was done by the respective personnel departments in an organisation. Personnel departments performed functions of recruitment, pay scale fixation and service conditions. As competition increased, technology advancements came about, organisations were faced with new challenges of retention of employees, training & development to keep pace with innovations etc. This led to the transformation of the personnel management function from one of concentrating on employee welfare to one of managing people in a way, which matches organizational and individual goals and providing employees with intrinsic and extrinsic rewards. Therefore, today Human Resource Management (HRM), historically known as personal management, deals with formal system for the management of the people within the organization. Many well-known companies report that they are trying to transform their workforce into a source of competitive advantage.

The goal of HR practices today is to achieve flexibility and adaptability to manage change and innovation in response to rapid changes consequent upon globalization. Relevant to HRM policies in this regard are training and multi-skilling, re-organization of work and removal of narrow job classifications. Appropriate HRM policies are designed, for instance, to recruit, develop and retain quality staff, to formulate and implement agreed performance goals and measures, and to build a unified organizational culture. The prevalent thought today is, Human resource development leads to organizational development.

Organizations have realized the need and importance of human beings as an asset. Managers know that their success lies in effective management of HR. In any business strategy, people are more critical than the plan. Strategies can only be effectively implemented if organizations have a competent force of employees. During the past decades, the HR has also evolved and has a more strategic function than ever before.
According to Mony, Noe, and Premeaux (2002), Human Resource (HR) is the function of an organization that consists not only of training and development, but also of individual career planning and development activities and performance appraisal. It is an activity that emphasizes training and development needs.

The Society for Human Resource Management (SHRM) founded in 1948, is the world’s largest association devoted to human resource management. According to the Society of Human Resource Management (SHRM; Schramm & Burke, 2004) in their latest report, 2004-2005 Workplace Forecast: A Strategic Outlook, there were 8 human resource trends noted that will impact the workplace in the next few years: These trends are found in the education sector too.

The changing trends show that there is a growing complexity of legal compliance in industry and so also there is a growing need to comply with all statutory & regulatory requirements in the education sector. The use of Technology and Technology aided instruction is here to stay in both sectors. Industry is preparing for the next wave of retirement and labour shortages whereas in schools shortages of competent teachers is a reality. Schools face high turnover and have retention problems. There are challenges with regard to changing demographics of a diverse workforce in both industry and education. In the school education sector demographics show a large women force in the urban areas and men in rural belts; inclusion of special teachers, counsellors, etc. It is essential for both sectors to demonstrate human resource return on investment. Schools have to demonstrate and justify need for new, additional staff and ensure equitable distribution of work. There is a growing emphasis on human resource competencies for practitioners. The need to invest in training and development to ensure development of competencies and measure effectiveness in terms of students’ intellectual growth and mental & physical hygiene, is at an all-time high in schools. In addition there is a growing need in society to uphold values & professional ethics. Thus, like in industry where
HR departments are playing a role in the promotion of ethics there is a growing need to ensure professional ethics are adhered to avoid misuse of technology, copy right issues of learning material etc. in the education sector too. Another important trend in industry is measuring human capital that is considering the employees as assets and measuring their performance to ensure both, effective use of manpower and nurturing human resource. This is also assuming importance in schools. Performance measurement is done to ensure effective use of available human resource and ensure the right fit.

Thus, environmental imperatives are playing an important role in redefining the role of HR in the industry and education sector too. A study of the school sector shows that statutory and regulatory authorities are monitoring and controlling schools closely, society and parents are becoming conscious of their Return on Investment in schools. There is a growing pressure on School managements to deliver quality education and ensure quality governance. Faced with intense competition, Managements too want to promote a professional image and avoid litigations. Thus, one sees schools seeking ISO 9001 - 2000 certificates as a mark of quality and to adopt a systems approach. The concept of schools as learning organisations has changed the approach of managing schools.

The challenge of tuning with the environment is increasing. An efficient HR strategy will give direction and bring in change in an orderly fashion. This will include retention, more competent staff, change and conflict resolution, allocation of human resources for the right fit, major business changes affecting human resources, linking the HR process to the mission and goals of an organization and HR.

If India is to be the Skill Capital of the World by 2020 by virtue of its demographic size then this Human resource development will need focussed attention. The starting point of course is developing teachers’ competencies vis-à-vis capacities
Currently there exists a mismatch between learning needs, competencies, and skills demanded from students in the knowledge society and the teaching skills of secondary teachers after their completion of pre-service and in-service training programs. It was felt that if in-service training & development in schools is competency based, it will help to bring about both teachers’ students’ and Organisational development. It is thus imperative to know & understand the meaning and history of competencies and competence based training (CBT)

2.4 CONCEPT OF COMPETENCY

In literature, definitions of competence vary from focusing on narrow skills to more holistic (or integrated/relational) conceptions. Competence means a skill and standard of performance reached. While competency refers to the behaviour by which it is achieved. Competencies are defined as skills, knowledge, attitudes and abilities that distinguish high performers. (Pg. 11, Sanghi S, The Handbook of Competency mapping, 2007)

In the literature, competence is said to consist of domain-specific competences within a discipline and generic competences.

Competencies refer to skills or knowledge that leads to superior performance. These are formed through an individual/organization’s knowledge, skills and abilities and provide a framework for distinguishing between poor performances through to exceptional performance.

Although the concept of competence has a long history in education and training, there is no universal consensus on definitions. In general, the understanding of “competence” is, shifting however from a narrow focus on what a person can do towards a more holistic focus on the possession and development of a complex combination of integrated skills, knowledge, attitudes and values displayed in the context of job performance (Paloma B, Rosanne T, 2010, pg. 9)
Teacher competence is one way of looking at teacher quality, as it can provide a framework for talking about essential qualities that are expected of teachers. At present, around the world, many reforms in teacher education are oriented towards making teacher education more functional for the development of competences teachers need in practice. And based on it competence standards for teachers, are increasingly being designed.

Competence is usually associated with highly professional performance and there is a direct link in the field of education between a teacher’s professional competence and pupil performance. There are two distinct meanings of „competence in education. From a theoretical point of view, competence is understood as a cognitive structure that facilitates specified behaviors. From an operational point of view, competence seems to cover a broad range of higher order skills and behaviors that represent the ability to deal with complex, unpredictable situations. The above definition includes knowledge, skills, attitudes, metacognition and strategic thinking. It means that a person’s behaviour and attitude needs to be commensurate with his knowledge & skills and together this determines one’s thinking and action.

Competencies can apply at organizational, individual, team, and occupational and functional levels. Competencies are individual abilities or characteristics that are keys to effectiveness in work.

It can be useful to think of competencies in terms of an iceberg. **Functional** competencies are at the tip—the portion above waterline that is clearly visible and therefore easier to assess for e.g. Classroom management. **Behavioural** competencies are below the waterline—they are more difficult to assess and harder to develop. Behavioural competencies can be understood as manifestations of how a person views him or herself (self-image, self-esteem, understanding self), how he or she typically behaves (traits), his / her potential to learn the skills needed for a new job or to cope with the demands of change.
It is said that Competencies are not “fixed”-they can be developed with effort and support. One needs to identify which competencies are crucial to realise goals and objectives and improve effectiveness. These can then be integrated into a training, learning and development plan.

2.5 COMPETENCY BASED TRAINING (CBT) AND COMPETENCY BASED TEACHER EDUCATION (CBTE)

Focus on competence & competency based training programs began in 1960’s in USA after Russia launched the Sputnik into space, thus rendering a blow to USA’s superior claims of being leaders in ‘Space programs. The successful launch by the Soviets caught America by surprise and wounded their pride. As Harris et al report, the immediate reaction of the United States was to ‘undertake some deep soul searching with respect to its education and training system. (The origins of competency - based training Steven Hodge pg. 182)

This led US to study all its systems and HRD initiatives in order to find the lag and gaps. One of the outcomes of their study was the need to have competency based training and teacher education

However, Competency Based Teacher Education (CBTE) initially emerged in the 1960s in the U.S. as part of the wider “competence movement” in education. Later, in the 1980s-90s, competence- based education appeared in the UK, Australia, New Zealand, Asia and Latin America, mostly in vocational education. Developments that have something to do with competence-based teacher education started to diffuse across the African continent towards the end of the 20th century.

The popularity of CBTE in the 1960s and 1970s should be seen in the context of a perceived increasing demand for teacher quality, and more specifically for effectiveness, efficiency, and
accountability. CBTE responded to this demand because it could provide clearly discernible results.

Central to CBTE is specification of the knowledge and skills that are assumed to be related to student learning and that are to be mastered by teacher trainees. Performance of the teacher trainee, rather than the completion of course work and the maintenance of a specified grade point average, is considered to be the most valid measure of teaching competence.

Another important element in the CBTE approach is the development of instructional management and evaluation systems to monitor the mastery of competences. Thus, CBTE describes a teacher training programme in which there are specific competences to be acquired, with corresponding explicit criteria for assessing these competences. In theory it overcomes the divide between ‘hands and mind’, theory and practice, general and vocational education.

Gradually the above CBTE approach of focussing only on knowledge and skill underwent a change. A significant body of research around the brain, human development and how people learn has influenced the thinking around CBTE. In a holistic (or integrated/relational) approach, competence is seen as a complex combination of knowledge, skills, attitudes and values displayed in the context of task performance.

Interpreted broadly, competence came to be regarded as not just trained behaviour, but, thoughtful capabilities and a developmental process. This approach made room for different levels of competence, e.g. entry/novice, experienced, specialist.

This conception of competence as a developmental process links up with the idea of lifelong education. It conceives of individuals as active subjects of a permanent teaching/learning process and focuses on the learning and competences acquired in different contexts. Thus a more holistic approach to CBTE came about.
This is influenced by certain social constructivist perspectives, i.e. the idea that people construct their reality in interaction with others. The cultural context and social practices involved in competent performance is now acknowledged. It reflects how personal attributes matter in achievement of outcomes in jobs within the context of an organisation and societal relationships.

Attention for teaching conditions (such as classroom size or commonly held beliefs in the wider community about teacher roles) is thus essential when thinking about teachers’ competence development, and a description of teacher competence should take into account the context and personal characteristics of the teacher when outlining how competence and performance are related.

Competence thinking in teacher education has also been expanded to encompass “social” or “emotional” competence. Research shows that (training in) emotional competence is necessary for teachers’ well-being and success in teaching, for example to be able to build resilience to adversity in the field or to self-monitor performance. Findings also showed that a teacher’s emotional competence predicts the level of burnout, stress levels and work satisfaction. The CBTE approach thus accepted that, teachers also need social-emotional competences to be able to effectively manage and develop students’ emotional development.

In other words, teachers’ personal attributes, competencies impact professional competencies and affect teacher and student performance. Thus teachers’ competency profiles show an inclusion of both personal & professional competencies.

2.5.1 TEACHER COMPETENCY FRAMEWORK AND COMPETENCY PROFILE

Competency Framework is a guideline for given set of competencies required for a particular job position. It is a benchmark or a set standard against which a person who is employed or to
be recruited is compared and a profile is developed. Review of Literature related to education showed that sometimes the terms, competency framework and profile are used interchangeably.

Competence-related efforts are essentially about providing a framework for the discussion and a tool towards quality education, and to ensure that these efforts are holistic, inclusive and owned by all stakeholders.

Developing a framework of quality competences requires an analysis of the social, economic, and political context. It is also suggested that competence models work best when the competences are gradated to match different stages in a teacher’s career.

Competency frameworks describe professional standards for teaching and make the knowledge and capabilities of teachers explicit for those within and outside the profession. Frameworks provide the means by which good teaching can be identified, rewarded and celebrated.

The Council of Europe (COE) has defined core teacher competences. Competence is defined as involving aspects such as knowledge, attitudes and behaviours, disposition, procedural skills, cognitive skills and experiential skills. The competences are intended for all phases (primary and secondary) of education.

International actors such as the OECD, UNESCO, the European Union and the Council of Europe have worked hard to define competences for citizens and learners that are considered necessary for living in the 21st century and then derived teacher competencies from it.

Most educators feel it is desirable to strive for the establishment of a generic Competency Profile (CP) / framework, reflecting a widespread belief that quality educators share some core qualities no matter where they work.
A CP ideally includes domain-specific knowledge, broader life skills competences and cultural and socio-emotional competences, and should take into account both personal factors that affect teachers’ performance and the educational context.

The fundamental question in all the countries regarding the development of CPs was, who decides on what the CP should look like and what competences it should include?

**Recommendations on developing a national Competency Profile has been given by the forum of Quality Educators for all which states that:**

- CPs should be developed in cooperation with all involved stakeholders.
- Definitions of competences should be linked to a common understanding of what constitutes quality teaching, and firmly linked to teachers’ daily classroom practice.

Competence profiles can inform future modalities of initial and in-service training, guide the revision of the teacher training curriculum, align the monitoring of teacher performance with competences and enable the ongoing professional development and motivation of all teachers. A competence profile could also pave the way for the unification of different classifications of teachers with respect to one, agreed-upon standard of qualification.

There have been efforts in India to develop a national Competency Profile (CP). In the early 1980s for example, a handbook on core teaching skills was published by the National Council of Educational Research and Training.

A representative of the National Council of Educational Research and Training (NCERT) shared: “We don’t have a national competence profile that’s obligatory for our teachers. We have The Right of Children to Free and Compulsory Education, the National Curriculum Framework and the National Curriculum Framework for Teacher Education. This last
framework is probably the closest to a CP.” (An International Study of Teacher Competences and Standards by Rosanne T and Paloma B; May 2011, pg. 80)

The National council of Teacher Education on competencies to be developed through pre-service education programs has reported that: At the very outset it may be highlighted that NCTE document *Curriculum Framework for Quality Teacher Education* properly brings out the case of promoting competency-based teacher education programmes which will have grounding on the basis of Indian culture and cherished human values. Taking a cue from this, the thrust of in-service teacher education progress has to be forging these competencies at the grass root level programmes which have been recently developed and undertaken by concerned organizations and structures created recently.

### 2.5.2 TYPES OF COMPETENCIES

There are different types of competencies identified by different experts in different countries as per the need of the countries.

In order to equip the teachers adequately and effectively in these performance areas and to enable them to become thoroughly competent to carry out these professional tasks with a desired level of efficiency and insight, competency areas have been identified.

According to Hoyle Joyce, (2013) the professional competencies needed for a good teacher and for his teaching may be classified under the three major competencies namely Instructional Competences, Organisation Competences and Evaluative Competences.

**Instructional Competences**
Conceptual Competence; Context Competence; Transactional Competence; Competences to develop teaching learning materials; Competences related to use of latest information and Communication Technologies in Teaching Learning Process

Organization Competences

Competences related to identifying resource; Competences related to mobilize resource; Management Competence; Adjustment Competence; Competence related to organization co-curricular activities.

Competence related to working /dealing with parents; Competence related to working with community and community members; Co-ordination Competence

Evaluative Competence

Construct evaluative items. Conduct tests; Assessment procedures; Interpretation of results; Acquired with new trends in evaluation.

Singapore has shown remarkable results in terms of students’ learning, where education is the main enabler for a nation with no natural resources and whose competitive edge lies in arming its people with skills and competencies needed for the 21st century. The Singapore model offers important lessons for India where teacher education is concerned. It adopts a holistic approach to developing the whole person and his or her full potential.
FIGURE 2.1: SHOWS SINGAPORE’S TEACHING COMPETENCY CLUSTERS

The Singapore competency model for teaching consists of one core competency, “Nurturing the Whole Child,” and four other major competency clusters, “Cultivating Knowledge,” “Winning Hearts and Minds,” “Working with Others,” and “Knowing Self and Others.” Each cluster has two to four competencies. For example, “Cultivating Knowledge” has four key competencies: subject mastery, analytical thinking, initiative, and teaching creatively (Lessons from Singapore by Steiner L, 2010).

Source: http://www.aspeninstitute.org/sites/default/files/content/docs/education%20and%20society%20program/ SingaporeEDU.pdf
Their entire HR process in terms of teachers’ is centred on the above model. From recruitment to training & development to performance measurement and career planning is based on the above competencies.

2.6 TEACHER COMPETENCE STANDARDS IN INDIA

In India the identification of competence and key performance areas has been done through job analysis of teachers by several investigators like Lalithamma (1977) and Panjwani (1982). Recently, research has been done on the applicability and desirability of competence standards for academic education. Competence standards have been employed for different uses, e.g. as a basis for teacher education curriculum and for programme approval; for teacher assessment, appraisal and certification; for professional teaching standard setting; and implementing differential pay scales for teachers. As such they have been said to either work as a control mechanism, or as an empowerment tool.

The concept of professional competence expresses a set of qualification preconditions (usually called professional knowledge, skills and attitudes) necessary for a successful professional performance. Professional competence is said to include the following elements:

- Subject competence.
- Pedagogical competence.
- Personal competence.
- Professional competence includes personal effectiveness competencies.
- Each of the above competencies have been described and/or defined by experts.
• Personal competence is described as a high level of personal responsibility, creativity, ability to solve problems, critical thinking, ability to work in teams, to initiate changes, high level of social abilities together with understanding, empathy and tolerance, and moral values.

• Subject competence means the quality and quantity of professional knowledge required in the academic disciplines related to the subject matters of teaching.

• Pedagogical/teaching competence relates to the pedagogical work of the teacher, and to teaching in particular.

• The following table 2.1 offers a list of indispensable competencies that characterise the teaching profession and the professional knowledge that forms its theoretical base (Vašutová, 1998).

**TABLE 2.1: LIST OF COMPETENCIES**

<table>
<thead>
<tr>
<th>Professional competence</th>
<th>Professional knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Subject competence</td>
<td>• Knowledge of academic/subject disciplines and their methodology, cognitive theory</td>
</tr>
<tr>
<td>• Interactive and co-operation competence, social competence</td>
<td>• Interpersonal strategy, social pedagogy</td>
</tr>
<tr>
<td>• Strategy of learning pupils/students</td>
<td>• Theory of learning, motivation, learning styles, didactics</td>
</tr>
<tr>
<td>• Communication skills</td>
<td>• Rhetoric, stylistics, pedagogical communication</td>
</tr>
<tr>
<td>Curriculum projects (designs)</td>
<td>Theory of design, curriculum theory</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Organisation and management of learning activities of pupils and students</td>
<td>Theory of class and school management</td>
</tr>
<tr>
<td>Problem solving competence in education</td>
<td>Theory of problem solving, decision-making, educational situations</td>
</tr>
<tr>
<td>Activity supporting and heuristic methodical approaches to teaching/learning</td>
<td>Didactics, strategy of teaching</td>
</tr>
<tr>
<td>Development of pupils'/students' personality</td>
<td>Theory of personality, pedagogical diagnostics</td>
</tr>
<tr>
<td>Management of efficient and objective means of assessment of the learning/teaching results</td>
<td>Monitoring, theory of evaluation, testing</td>
</tr>
<tr>
<td>Managing the didactical and information technologies</td>
<td>Net-based learning theory, ICT</td>
</tr>
<tr>
<td>Pedagogical creativity in preparation of teaching (instructional) tools and innovative methodology</td>
<td>Theory of creativity</td>
</tr>
<tr>
<td>Self-reflection and self-development</td>
<td>Tools of self-monitoring and self-evaluation</td>
</tr>
</tbody>
</table>

Pre-service teacher education is able to develop only some of professional competencies mentioned above.
Dave (1998) in NCTE's *Competency-based Commitment Oriented Teacher Education for Quality School Education* (Initial Document) provides the most comprehensive framework for quality teacher education.

The ten competency areas, together with certain specific competencies which may be specified under each are:

- *Contextual Competencies* comprising a wider view of the development of education in society and teachers' role in it;

- *Conceptual Competencies* including various concepts of education and learning and psychological, sociological and neuro-physiological aspects of education, etc.

- *Curricular and Content Competencies* related to specific stage of education such as primary, upper primary or secondary;

- *Transactional Competencies* as regards General, Subject-wise, Stage wise dimensions;

- *Competencies in Other Educational Activities* such as planning and organizing morning assembly, etc.;

- *Competencies Related to Teaching-learning Material* such as preparation, selection and use of Classical Teaching-learning materials, New Educational Technology, Local Resource, etc.;

- *Evaluation Competencies* including preparation, selection and use of evaluation tools, tests, etc.;

- *Management Competencies* including matters like organization of classroom, school and community activities;
- **Competencies Related to Parental Contact and Co-operation** covering activities of Parent Teachers Associations, etc.;

- **Competencies Related to Community and Co-operation** involving activities of mutual interest for institutional as well as community development.

Based on Dave’s theoretical construct and earlier studies on job analysis, TQM Expert Marmar Mukhopadhyay (2005) derived 8 key performance areas and classified Competencies into 3 categories:

- Content Competencies
- Education or pedagogy related competencies
- Managerial competencies.

The most important document regarding teachers’ competences is the National Curriculum Framework for Teacher Education. The following paragraph derives from the Preface of the National Curriculum Framework for Teacher Education 2009.

“Teacher education needs to be seen, as stated in the NCFTE, as a holistic enterprise involving actions of different kinds and from multiple fronts aimed at the development of the total teacher – knowledge and understanding, repertoire of skills, positive attitudes, habits, values and the capacity to reflect.”

The Right of Children to Free and Compulsory Education Act 2009 (which came into force in April 2010). It states that “A teacher (…) shall perform the following duties, namely:

(a) Maintain regularity and punctuality in attending school;

(b) Conduct and complete the curriculum in accordance with the provisions of sub - section (2) of section 29.
(c) Complete entire curriculum within the specified time;

(d) Assess the learning ability of each child and accordingly supplement additional instructions, if any, as required;

(e) hold regular meetings with parents and guardians and apprise them about the regularity in attendance, ability to learn, progress made in learning and any other relevant information about the child; and

(f) Perform such other duties as may be prescribed.

The above provisions highlight the need for developing Time management, Interpersonal, Questioning and feedback competencies in teachers.

All these teacher competencies are to be developed first during pre-service teacher education and subsequently updated and strengthened during recurrent in-service teacher orientation programmes and also as an essential component of continuing and self-directed professional enhancement by individual teachers on their own.

Based on the above theoretical aspects, Aims of Continuing Professional Development Programmes for Teachers (NCFTE) and need analysis, Personal and professional competencies have been identified by the researcher.

- Personal Effectiveness competency has been defined to include
  a) Self-awareness; b) Time Management; c) Change management.

- Professional competencies operationalized to include
  a) Classroom management; b) Resource management; c) Communication skills
2.6.1 PERSONAL & PROFESSIONAL COMPETENCIES

It is common knowledge among educators, business leaders, and mental health professionals that the boundary between personal lives and professional roles is permeable. We come to work after leaving the pleasant or the unpleasant morning at home. By the same token, we go home every day filled with a variety of different emotions after a day at school or the office. The development of key skills that permeate personal and professional landscapes leads to lasting changes that promote quality teaching and leadership.

Personal and professional development must take place in tandem. As the individual learns and experiments with new emotional and social skills, the student demonstrates new behaviors inside and outside the school walls. Reflecting on one’s purpose and professional vision lays the foundation for the transformational process. A coaching relationship provides a safe haven for mindful attention to self-change in the areas of self-awareness, self-management, social awareness, and relationship management. It is through this individual process that the teacher and administrative leader positively impact the culture and climate of the classroom and school. When schools commit to developing the social and emotional skills of adults and children we see many positive improvements such as increased attendance, decreases in suspensions, better student engagement and increased academic achievement (Journal of education leadership pg. 270 Weissberg & Durlak, 2005).

Personal Professional Coaching and training is grounded in theories of adult learning, motivation, intentional change, emotional intelligence and self-psychology (Patti, Stern, Martin, & Brackett, 2005).

The selection of personal and professional competencies is grounded in the belief that effective professional development happens when the adult learner connects personally to the new learning. When educators participate in reflective practices that cultivate self-awareness,
emotion management, social awareness, and relationship management, they are in a better position to deliver high quality instruction and leadership.

2.7 PERSONAL EFFECTIVENESS COMPETENCIES

Theory of Personal effectiveness competencies:

Personal effectiveness describes the impact and influence that an individual has on the people around him/her. The influence is exerted by the way that individuals communicate and behave in the presence of others. Underpinning this behaviour and communication are the things that are going on in our bodies, hearts and minds.

The self is at the centre of a person's competence. The term 'efficacy' has been used in the sense of potential effectiveness. Several related terms denoting efficacy need to be distinguished. (Such distinctions have been discussed, for example by Bruckner, 1988), and some of them are briefly defined here. Self-esteem is a "trait reflecting an individual's characteristic, effective evaluation of the self (for example feelings of self-worth or self-liking)" (Gist and Mitchell, 1992). Self-efficacy “refers to beliefs in one's capacities to mobilise the motivation, cognitive resources and courses of action to meet given situational demands.”

Bandura (1982) proposed the concept of self-efficacy, and a lot of research has been done on this concept. Three aspects are important in self-efficacy. First, judgement of one's perceived capability to perform a specific task. Secondly this judgement is not static and can change with new information. Thirdly, it involves a mobilisation component, i.e., differential performance.

Personal efficacy is the general sense of adequacy which is likely to contribute to a person's effectiveness in working for a task-related goal. It may be useful to consider what contributes to personal efficacy as this may help to devise ways of measuring and analysing the variable.
It is proposed here that four sets of factors contribute to personal efficacy: motivation, self-awareness, proactivity, and action-orientation.

Personal efficacy results in action. In fact, action-orientation is a part of efficacy. Action-orientation may be shown in three ways. An action-oriented person shows some amount of self-discipline, or what McClelland (1975) has called “activity inhibition”.

The person plans detailed activity schedules to reach a goal. Not satisfied only with formulating goal, he prepares functional linkages between the goal and his present state. Finally, such a person is also future-oriented. Instead of living in the past or only confining himself to the present, he is obsessed by the future – what he wants to achieve, how he will act and so on.

A person with high personal efficacy has higher awareness both of his strengths and his weaknesses. Such awareness helps him to use his strengths effectively and to manage his weaknesses by taking steps to remove them. He is also aware of his achievements. With such awareness his concern for self-development (increasing his strength and dealing with his weaknesses) produces better results for him.

One simple model for self-awareness, which is widely used, is the Johari Window, developed by Luft and Ingham (Luft, 1973). In this model, there are two main dimensions for understanding the self: those aspects of a person’s behaviour and style that are known to him (self) and those aspects of his behaviour that are known to those with whom he interacts (others). Table 2.2 indicates the combination of these two dimensions reveals four areas of knowledge about the self.
TABLE 2.2: JOHARI WINDOW

<table>
<thead>
<tr>
<th>Known to self</th>
<th>Not known to self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known to others</td>
<td>Known to others</td>
</tr>
<tr>
<td>Arena (A)</td>
<td>Blind (B)</td>
</tr>
<tr>
<td>Closed (C)</td>
<td>Dark (D)</td>
</tr>
</tbody>
</table>

The benefits of greater personal effectiveness range from simply feeling better about one-self, to attracting a greater following, to greater personal impact upon others, to improved productivity, to establishing higher credibility and lots, lots more. Thus self-awareness is an important component of the personal effectiveness competency.

It is expected that teachers and counsellors should themselves have reached the objectives of personal development to a certain extent. They need an elaborated self-concept, good knowledge about their strengths and weaknesses that helps to perceive others as detailed as possible and to be empathic (to take their point of view without losing the own one).

Keeping in view the professional expectations from a teacher in mind the competency of Self-awareness was identified as a need for development.

2.7.1 SELF-AWARENESS

One of the broad aims of continuing professional development programmes for teachers as per NCFTE-2010 is to enable teachers to explore, reflect on and develop one’s own practice.
There is no opportunity for teachers to examine their own biases and beliefs and Apart from conceptual and pedagogical aspects, existing programmes need to develop certain attitudes, dispositions, habits and interests in a teacher reflect on their own experiences as part of classroom discourse and enquiry.

Understand the self and others, one’s beliefs, assumptions, emotions and aspirations; develop the capacity for self-analysis, self-evaluation, adaptability, flexibility, creativity and innovation. Develop habits and the capacity for self-directed learning, have time to think, reflect, assimilate and articulate new ideas; be self-critical and to work collaboratively in groups. (NCFTE Chap 1 pg. 12)

Teacher education programmes at all stages should provide opportunities to the would-be teachers for understanding the self and others, develop sensibilities, the ability for self-analysis and the capacity to reflect.

2.7.2 TIME MANAGEMENT

Teaching is a time consuming occupation, and one in which both learner achievement and job satisfaction are proportional to time and effort expended, yet one of the commonest complaints heard from teachers is ‘I haven’t got time’.

Time management: Time management is taken as one of the variables of work-life balance just because time affects human life in any situation: how an individual utilizes his time and how he divides his time between work and life.

Unless, an individual has a clear concept regarding the purpose of life, he/she cannot frame an effective time management strategy. Whether it's personal or professional life, one should know what to do and how much time will be required. The tool and techniques are dependent upon work done and the amount of time required for completion. The Pareto principle is the
most popular theories that help people to understand the importance of time management in every sphere of life.

Pareto Principle: 80-20 Rule Vilfredo Pareto was an Italian economist and philosopher who formulated 80-20 rule. His research work became the thumb rule of many business organizations, where 80% of productivity came from 20% of working employees. This 20% comprised the most efficient people who conducted their work within a specific span of time, thereby contributing to high rate of productivity. Based on this theory, business and quality management pioneer, Dr. Joseph Juran, said that, 'vital few, trivial many'. The 80-20 rule could be applied everywhere where time plays a major role to uplift productivity and success of organizations. The key element of this theory is the 20% that matters the most. If you consider all the things that you are doing entire day, you will actually find out that it's the 20% of your work that produces the net result. Thus, you should try different ways that will allow you to effectively manage the minor portion. Within the limited time (20%), you have to categorize your work and activities for achieving the goals in your life.

Time management can also be considered as the process by which an individual more effectively accomplishes tasks and goals (Schuler, 1979), a process by which an individual obtains control over the timing and the content of what he/she does and what is accomplished. This is recognised as critical for teachers’ performance today.

The effective use of time has long been recognized as a crucial factor for success in many different fields and many practical techniques have been devised for improving time management six principles for effective time management. These principles included being aware of self, structuring time appropriately, setting goals and priorities, increasing personal efficiency and effectiveness, scheduling time for activity, and scheduling relaxation time.
2.7.3 CHANGE MANAGEMENT

“Nothing is permanent but change”. This quote by the philosopher Heraclitus holds true for teachers today. Research in pedagogy, andragogy and psychology, Human resource policy changes at national and international levels are affecting the education sector in a big way and all the time due to the interdependence and inter-relatedness in all aspects of life. As mentioned earlier, today the changing environmental imperatives have made organisations dynamic. Environmental Imperatives like Impact of globalization, Ownership for performance, Statutory & Regulatory requirements, have made it mandatory for teachers to adapt to change. Thus change management is an important competency that must be developed.

Educators have identified one more important skill for the teacher and that is to analyse changes in the environment with other members of the work community, to see these changes in relation to the teacher’s and the school’s possibilities and to determine which changes and outcomes are of the greatest relevance to the development of teaching.

Teachers will be able to fulfil all the new roles & expectations and responsibilities and perform their role when they are confident, aware of one’s own strengths and weaknesses, and are able to identify their developmental needs, manage time and change effectively. In short, when their professional & personal competencies are enhanced. The researcher chose to focus on personal effectiveness competencies because pre-service education focuses on subject and pedagogical competence in a big way. There is very little focus on personal effectiveness competencies. It may emerge as a by-product of development of subject & pedagogical competence. This gap needs to be filled through in-service programs.
2.8 PROFESSIONAL COMPETENCIES

Brophy (2001) distinguishes 12 principles of effective teaching: Supportive climate; Opportunity to learn; Curricular alignments; Establishing learning orientations; Coherent content; Thoughtful discourse where questions are planned to engage students in sustained discourse structured around powerful ideas; Practice and application activities: students need sufficient opportunities to practice and apply what they are learning and to receive improvement-oriented feedback; Scaffolding students’ task engagement; Strategy teaching; Cooperative learning; Goal oriented assessments; Achievement expectations. (TALIS)

The above Principles helped to identify competencies required for effective teaching. Student management, Resource management, Questioning, Interpersonal and Feedback competences emerge as the needs and requirements for the 21st century teachers.

The development of pedagogical competence is one of the key targets of initial teacher education and the continuous professional development of teachers. Nevertheless, the curriculum of teacher education is marked by an uneven ratio of academic and professional studies at the expense of pedagogical and teaching practice.

The fact results from incorrect judgement on the ratio between the subject matter and pedagogical components in the teacher profession. The discrepancy deepens with the higher degree of schools/higher level of education (Buchberger 2000, Sander 1996).

Thus some pedagogical competencies critical to teachers performance have also been identified. Pedagogical competencies of Communication and classroom management have been identified.
2.8.1 COMMUNICATION COMPETENCE

Since the teaching process is an interactive category, the conditions of effective social interaction are at the same time the conditions of the effective teaching process. Communication is the most obvious manifestation of the social interaction. Thus, the effectiveness of education in the school situations is determined by the quality of the communication process.

Communication competent teacher is:

- Adaptable and flexible;
- Involved in the conversation – he/she manifests the involvement in conversation by behavioral manifestations (gests, visual direction), and by cognitive activities (concluding, repeating key sentences, paraphrasing);
- He/she has skills to manage conversation (to regulate interaction and control social situations, define and change the aims of the conversation);
- Considers the social relations and make a plan of the engagement;
- He/she has developed empathy;
- He/she is effective in the communication process – sustain the aims of conversation and personal aims;
- He/she has expectations coordinated to the situation;
- He/she is ready to team work;
- He / she is learning continually about communication process, and is gaining insights about communication situation; he/she is aware of his/her own behaviour;
- Continually develop the communication skills, train and test messages exchange;
• Continually master the use of different communication means (the means of the ICT in teaching, increasing the teachers’ informatics literacy, dealing with PC as the functional teaching means to demonstrate and investigate technical processes and phenomena).

Thus teachers who are competent in communication have effective Interpersonal, questioning and feedback skills.

2.8.1.1 INTERPERSONAL COMPETENCE

Interpersonal awareness is the level at which a person is paying attention to other people and his/her own communication behaviour during interaction and how that person responds to what he/she is observing. Interaction involvement is complex concept: it is “the extent to which an individual participates with another in conversation.” (Cegala et al. 1982: 229). Highly involved people integrate feelings, thoughts and experiences with the ongoing interaction; their consciousness is directed toward self, others and conversation topic; their speech can be marked as consistency and understanding; they have focus on the message meanings and importance; they are more effective to take information.

Improving students’ relationships with teachers has important, positive and long-lasting implications for students’ academic and social development. Solely improving students’ relationships with their teachers will not produce gains in achievement. However, those students who have close, positive and supportive relationships with their teachers will attain higher levels of achievement than those students with more conflictual relationships. If a student feels a personal connection to a teacher, experiences frequent communication with a teacher, and receives more guidance and praise than criticism from the teacher, then the student is likely to become more trustful of that teacher, show more engagement in the academic content presented, display better classroom behavior, and achieve at higher levels academically. Positive teacher-student relationships draw students into the process of learning
and promote their desire to learn (given that the content material of the class is engaging and age appropriate).

Teachers who foster positive relationships with their students by listening attentively, giving specific and timely feedback and posing appropriate questions, create classroom environments more conducive to learning and meet students’ developmental, emotional and academic needs.

2.8.1.2 QUESTIONING COMPETENCE

Education goals and methodologies are changing today from the mere acquisition of facts and information to the development of reflective thinking and the intelligent manipulation of materials. According to Reid, Hopkins and Holly (1987), and Gbamanja (1989), questioning is a technique used to sensitize an inquisitive mind and to ascertain if learning objectives can be attained. By so doing teachers can develop more ownership of the class. Sensitizing somebody else’s mind requires listening and insightful questioning; in other words it requires the art of being a good conversationalist. A good inquiry-oriented teacher is an excellent conversationalist. He or she listens well and asks appropriate questions assisting students in organizing their thoughts and gaining insight into what is being taught. An inquiry-oriented teacher seldom tells but often questions.

When questioning is handled well, it leads to student centred teaching, which is a fundamental requirement in modern instruction.

Additionally, Gbamanja (1989) argued that questioning is not merely finding out whether students prepared for the lesson, it is used for teaching, drilling or practicing, guidance or leading the minds of learners, stimulating or motivating students to learn, and evaluating their understanding of the lesson. It takes the competence of good questioning to achieve these objectives. Good questioning according to (Reid, Hopkins & Holly, 1987; Amalaha, 1979)
should be clear, concise, brief and direct to the point. It should be free from ambiguity and thought provoking and should be suited to the age, abilities, interests and characteristics of the particular learners.

Asking the right question is at the heart of effective communications and information exchange. By using the right questions in a particular situation, it is possible to improve a whole range of communications skills: for example, one can gather better information and learn more and help others to learn too. Stronger relationships can be built and students can be managed more effectively.

“Good learning starts with questions, not answers.”

Questioning enables teachers to check learners’ understanding. It also benefits learners as it encourages engagement and focuses their thinking on key concepts and ideas.

Questions can do more than measure what students know. Appropriately challenging, engaging, and effective questions stimulate peer discussion and encourage students to explore and refine their understanding of key concepts.

- Questions can help diagnose student understanding of material.

- Questions are a way of engaging with students to keep their attention and to reinforce their participation.

- Questions are a way to review, restate, emphasize, and/or summarize what is important.

- Questions can be used to stimulate discussion and creative and critical thinking, and to determine how students are thinking.
Questions can help students retain material by putting into words otherwise unarticulated thoughts.

Theory and practice both state that questioning can:

- Lead students to consider new ideas and take risks
- Challenge their beliefs and prompt them to reconsider their current thinking
- Encourage students to ask their own questions and to welcome an ethos of enquiry, risk and challenge.

The highest-order open-ended questions engage students in dynamic thinking and learning, where they must synthesize information, analyse ideas, and draw their own conclusions, preparing them for the larger community, where few issues are black-and-white. Adolescents need to become critical thinkers, find their own voice, and be recognized for having opinions that matter.

One of the 21st century learning attributes is developing questioning in students.

As Morgan and Saxton (1991) put it, ‘We learn by asking questions. We learn better by asking better questions. We learn more by having opportunities to ask more questions.’

2.8.1.3 FEEDBACK COMPETENCE

High quality academic instruction refers to instruction that is appropriate to students’ educational levels, creates opportunity for thinking and analysis, uses feedback effectively to guide students’ thinking, and extends students’ prior knowledge. Feedback is information about how we are doing in our efforts to reach a goal. John Hattie (2008). Whether feedback is just there to be grasped or is provided by another person, helpful feedback is goal-referenced;
tangible and transparent; actionable; user-friendly (specific and personalized); timely; ongoing; and consistent.

Decades of research revealed that feedback was among the most powerful influences on achievement, Education research support the idea that by teaching less and providing more feedback, we can produce greater learning (see Bransford, Brown, & Cocking, 2000; Hattie, 2008; Marzano, Pickering, & Pollock, 2001).

Eric Mazur (2009) at Harvard hardly lectures at all to his 200 introductory physics students; instead, he gives them problems to think about individually and then discuss in small groups. This system, he writes, "provides frequent and continuous feedback (to both the students and the instructor) about the level of understanding of the subject being discussed" producing gains in both conceptual understanding of the subject and problem-solving skills. Less "teaching," more feedback equals better results. (Seven Keys to Effective Feedback Grant Wiggins, 2012)

It is important for students to know how well they are doing as they learn. This is because when students know that they are doing well it gives them a sense of achievement and this motivates them to learn more. Similarly, it is also important to let students know when they have made a mistake so that they will learn from it and take corrective measures. Hence, it is absolutely essential for teachers to monitor students’ learning and give them feedback. Feedback can be given to individual students, to a group of them, or to the whole class. (The importance of giving feedback by Prof Y.K.IP, Dec 2005)

Education and teaching process consist of communication among the group members and communication between groups. The special conditions of teachers work, are the skills and strategy of team work, and ability to organize students’ team-work in the classroom.
2.9 CLASSROOM MANAGEMENT

The term classroom management refers to more than discipline of control but rather spans a broad range of activities such as arranging the physical environment, establishing and maintaining classroom procedures, monitoring pupil behaviours, dealing with misbehaviour and keeping students on task in a productive environment (Sandford, Emmer & Clements, 1983; Emmer, 1987)

Student Behaviour Management Project a best practice in Australia recommended seven principles identified that are summarised as:

1. An eco-systemic approach to discipline that considers the complex interplay between ‘environmental, interpersonal and intra-personal factors’
2. The creation of a safe, supportive and caring environment;
3. Inclusiveness which caters for the different potentials, needs and resources of all students;
4. A student-centred philosophy;
5. A quality learning experience;
6. Positive classroom relationships
7. School-based and external support structures

(Judy Peters, 2009, pg. 6)

According to Lourdusamy and Khine (2001) effective behavior management is at the heart of ‘learner centred teaching’ and must be a dominant focus throughout teacher education programs.

Thus classroom management in the 21st century is seen as very challenging for teachers in India. The Right to education Act, National Curriculum framework, and Government’s Quality
improvement initiatives, emphasizes on the use of latest trends in pedagogy, use of technology and Continuous Comprehensive evaluation (CCE) by teachers.

The policy of “inclusive education’, the slogan of “leave no child behind” and more recently Right to education for every child, have all, led to the classroom becoming more dynamic than ever. Add to this, is the approach of constructivism in teaching (State schools have been asked to adopt the Constructivist methodology of teaching) and continuous comprehensive evaluation. Naturally then teaching has become extremely complex.

All teachers have to implement effective strategies such as building quality relationships with students, making learning more student-based, and maintaining consistent classroom expectations. The skill of managing students, resources needs to be developed anew. Thus teachers need the competencies for classroom management for this will help students get enriching learning experiences and teachers the satisfaction of having done their job well!

This approach requires the teacher to facilitate student learning. Group learning is a key ingredient here. Teachers will need to develop the following communication skills to be able to provide students with constructive learning experiences:

- Questioning - to trigger thinking;
- Listening - to the child’s point of view;
- Feedback - on progress made in new learning and to inform parents about their child’s progress.
- Inter-personal skills- for s/he is going to be working with peers, parents.
Above all this, teachers need to be able to plan and organise appropriate learning material, provide varied activities, plan for space, time, other teacher’s support etc. In short manage resources effectively.

CCE requires the teachers to use different tools and techniques to assess each student. For accurate comprehensive evaluation of their students, teachers have to get inputs from peers and parents also.

2.10 RESOURCE MANAGEMENT COMPETENCE

Teachers, like doctors and any other professional workers, need essential tools to do their work best. Of course, it is true that the central figures in any learning situation are always the students and not the teachers, but it is equally true that learning may be greatly enhanced by the utilization of the many resources available in the school and various school agencies. Nevertheless, the teacher’s planning of effective learning activities will be easier, less time consuming and often vastly expanded in potential scope when they know precisely what type of materials are available to them and when to draw upon them (Brown, Lewis & Harcleroad, 1959, p. 47). Therefore, it is imperative that teachers be thoroughly acquainted with the teaching resources and services available to them and that they have a clear understanding of the essentials of a functional materials-selection program.

Many of the materials needed for effective teaching are used often enough to warrant their being part of every classroom’s basic equipment. However, at the other extreme are materials—often relatively expensive and needed in individual classes rarely and for short periods—which serves the specific needs of an educational system. Teachers are concerned about the ready availability of appropriate instructional materials because they know how much such tools influence teaching and the quality of learning in the classroom (Ibid, p. 48).
Effective interpersonal and professional oral and written communication includes appropriate applications of information and communication technology (ICT) during instruction. The idea behind ICT in education is to develop professionally competent teachers who can handle instructional processes and appropriately use the available instructional materials in a school environment to affect teaching and learning.

Fundamentally, educational technology introduces teachers to the evaluation, selection, and use of audio visual materials and equipment including films, slides, transparencies, projectors, globes, charts, maps, bulletin boards, programmed materials, information retrieval systems, and instructional television (Ololube, 1997). Nonetheless, one important difference between some educational practices today and those of a generation ago is the relative emphasis teachers put upon doing as a means of teaching and learning. Today’s schools give more attention to realistic, lifelike learning situations, which go well beyond the word-of-mouth explanations by the teacher or word-in-print explanation of books. One means of developing this realism is through classroom construction activities, which challenge students to solve instructional problems in many fields of study by transforming simple, inexpensive instructional materials into forms which help them and other people to learn.

Thus student management, resource management and communication skills have been identified as important competencies to be developed in the pedagogical professional competence category for teachers.

2.11 COMPETENCY BASED OD INTERVENTION PROGRAM

Designing the OD intervention – Competency based In-service training Program has the following components

- Face to Face sessions
- Assignments (individual/group)
- Quality circles
- Lesson observations and
- Teachers’ self-reflections

The design and practice of current pre-service teacher education programmes is based on certain assumptions, which impede the progress of ideas and the professional and personal growth of the teacher. It is assumed for instance, that disciplinary knowledge is ‘given’, which the trainees ‘acquire’ through general education and which is independent of professional training in pedagogy.

In-service programmes have drawn their substance from the emerging needs and concerns of education as faced from time to time. As a result these programmes have, at best, been awareness programmes in respect of specific concerns and not teacher development programmes, as visualised.

The major indicator of quality of training is its relevance to the needs of teachers. However, most of the training programmes are not organised according to the needs of the teachers and the resources are not utilised properly.

Teachers need to develop appropriate competencies to be able to not only seek the above understandings in actual situations, but also be able to create them, identify their own personal expectations, perceptions of self, capacities and inclinations, be receptive and constantly learning; own responsibility towards society and work to build a better world.

Teachers should be provided opportunities for self-learning, reflection, assimilation and articulation of new ideas; (NCFTE 2010)
Recent research clearly establishes the importance of well-trained teachers (Hanushek and Wobman, 2007; McKinsey, 2007).

The design of in-service programmes would depend on the specific aims of each programme, given a vast variation in the context. However, some general principles with regard to the content and pedagogic approach would need to be kept in mind during the designing and implementation across various programmes. They should also provide ample opportunities to observe and engage with learners and learn to work collaboratively in groups. There needs to be adequate curricular space for critical content engagement and the development of professional capacities in pedagogy, observation, drama, craft, story-telling and reflective enquiry.

Programmes must build on the principle of creating ‘spaces’ for sharing of experiences of communities of teachers among themselves, to build stronger shared professional basis of individual experiences and ideas. Giving teachers a space to develop and hear their own voices is of utmost importance. Programmes must be designed with a clear sense of their aims and how the strategies of the programme are going to achieve these aims. This alone can ensure that programmes remain on track and ‘alive’ rather than routine when they are implemented. This may also require then, that every group of trainers either directly participate in the design of the programme, keeping in mind a specific group of teachers, or adapts a given programme to a specific group of teachers. Programmes also need to include a plan for post-programme support and include training/orientation of support faculty in the same. Programmes that seek to develop or alter basic practice need to be planned towards extensive interactions over time with the same resource group. Keeping the above theory in mind, for the present research, Quality Circles was used as one of the follow up technique.
2.12 QUALITY CIRCLES

Quality Circles is a term used in human resources management that refers to the technique of motivating workers by allowing them input into decisions concerning the production process, thereby increasing productivity and profits. With the implementation of quality circle in an institution definitely the quality and productivity of teacher can be enhanced. Quality circles have recently been suggested as a technique for enhancing employees' quality of work life and satisfaction with his/her work.

Quality circles were first established in Japan in 1962; Kaoru Ishikawa has been credited with their creation. The movement in Japan was coordinated by the Japanese Union of Scientists and Engineers (JUSE). The first circles were established at the Nippon Wireless and Telegraph Company but then spread to more than 35 other companies in the first year. By 1978 it was claimed that there were more than one million quality circles involving some 10 million Japanese workers. They are now in most East Asian countries; it was recently claimed that there were more than 20 million quality circles in China.

Quality circles serves as an employee participation method. It is used to develop the tremendous potential within. It is a way of capturing the innovative and creative power of its people.

Quality circle is considered to be an HRD technique. It is a building philosophy that helps to provide self-motivation & happiness and improve the work environment. Naturally then it is implemented in the education sector tool and is being used as an on-going improvement program.

For the present research the concept of Quality circle entailed:

- 8 teachers sitting in a circle – non-hierarchical and inclusive
• Teachers taking turns in speaking and listening, sharing ideas, contributing to a group situation, observing, thinking, concentrating

• Learning relationship skills, assertive communication

• Brain storming and discussions - designed to promote trust, respect, empathy and understanding.

• Exploring issues relating to personal, social, moral and health education both in and outside of class.

• Emotional 'safety' for the group produced by firm but gentle ground rules.

• Equality of and respect for all participants.

Epilogue

Thus, the OD intervention training programme based on personal and professional competencies is found to be highly relevant. Both, theory & practice show that, schools need to have HR support structures that is have a designated professional who would be responsible for teachers’ well-being, support and development. The survey of existing HR practices showed that Principals take on the above responsibility. Principals have many other organisational functions, thus are overburdened and find it challenging to take care of the finer nuances of teachers’ development mentioned above.

Whereas, support to principals from HR professionals will help to create more expansive environments for the professional learning of teachers which would be characterised by:

• Supported opportunities for personal development that go beyond school or government policies
• Out of school educational opportunities to including time to stand back reflect and think differently

• Close collaborative working

• Colleagues (being) mutually supportive in enhancing teacher learning

• Opportunities to integrate off the job learning into everyday practice

The theoretical and conceptual framework of research provided a better understanding and learning about competency based approach to teacher development. The context of school as an organisation, socio-economic and cultural context of its human resource-teachers, students and parents need to be kept in mind when developing competency based training programmes.