CHAPTER III

METHODOLOGY

3.1   INTRODUCTION

This chapter deals with the methodology of the present investigation. The focus of the present investgation, is to understand the competencies of school principals and the problems encountered by them. Their level of competencies in the context of different personal variables like age, experience, gender, qualifications have been studied. The profiles of effective principals have also been constructed. To realise the objectives of this study quantitative and qualitative approach has been followed. The researcher has used the survey cum case-study strategy for the fullfilment of objectives. The survey method has been used to gather data from the educational managers pertaining to their level of competencies, personal background, and barriers faced by them. The data obtained would further help in selection of effective principals.

In order to understand what makes the educational managers effective, detailed in-depth studies were needed. Therefore the case-study method was adopted. 'How' and 'Why' questions are more explanatory and are likely to lead the use of 'case studies' (yin, 1984). Case-study also helps to investigate a contemporary phenomenon within its real-life context. (Yin, 1981a, 1981b). Realistic and descriptive data can be got from case-studies.

This kind of indepth study tries so support the view that school principals behave according to the situations they are placed in, rather than the nature of institution or the area where school is situated. It may however be said that the generalisations drawn from the study of school principals of Baroda City will be applicable in largely all schools of Baroda.

3.2 STATEMENT OF THE PROBLEM

`A study of Managerial Competencies of Effective Educational Managers.'

3.3 OBJECTIVES OF THE STUDY

1. To find out the level of competencies of Educational Managers of Secondary Schools.

2. To study the effect of personal variables like age, gender, experience and qualifications, on the competencies of educational managers.

3. To study the factors acting as barriers on the effectiveness of educational managers.

4. To conduct case-studies on selected effective educational managers of secondary schools in order to find out the reasons for their effectiveness.

3.4 POPULATION

The population of the study consisted of 140 educational managers i.e. school principals of secondary schools of Baroda city. This included English, Hindi,

Gujarati, Marathi and Sindhi Medium schools, under different management types like government, government aided and private-unaided.

3.5 SAMPLE

Random sampling technique was adopted by the investigator and 40 schools were selected. These 40 schools were of English, Gujarati, and Hindi medium and under different management types i.e. government, government-aided and private -unaided. The details have been presented in the table below. The sample consisted of 40 principals of these schools.It also consisted of 6-10 teachers from the secondary section of each school. The case study schools consisted of a sample of 4 effective school principals selected from the above 40 principals, 4 students from the student council, 4 parents from the Parents Teachers Association (PTA). and four secondary school teachers. Incidental sampling method was adopted for the selection of teachers, students and parents.

TABLE - I

DISTRIBUTION OF SCHOOLS ACCORDING TO
MEDIUM OF INSTRUCTION AND MANAGEMENT TYPE

| | MANAGEMENT TYPE | | | |
MEDIUM	GOVT.	GOVT-AIDED	PRIVATE UNAIDED	TOTAL
GUJARATI	-	18	-	18
HINDI	-	2	-	2
ENGLISH	1	15	4	20
SINDHI	-	-	-	-
MARATHI	-	-	-	-
TOTAL	1	35	4	40

3.6 TOOLS FOR THE PRESENT STUDY

In order to study the principal's own perception and teacher's preception of their principals regarding the level of compehencies of secondary school principals in their organizational context, the effect of principal's personal variables on their competencies, the different barriers encountered by principals and to conduct case-studies on effective principals, the following tools for measurement were developed to suit the study.

(I) In order to meet objective number one, a tool to measure the level of competencies of secondary school principals i.e. a Managerial Effectiveness Scale(MES) was developed by the Investigator.

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(II)   To meet objective number two, a tool to collect personal information about the principal i.e. Personal Data Questionnaire was developed.

(III) To meet objective number three an un-structured intenview schedule was developed to find out the barriers faced by secondary school principals.

(IV)   For objective four, a tool to collect basic data about the school i.e. School Profile was developed.

(V)   For objective four, shadowing technique was used, principals were shadowed in their respective work situations.

(VI)   For objective four, semi-structrued interview schedule was developed by the investigator. It was used for the four effective principals, teachers, parents and students of the same school.The details have been presented in a schematic fashion below.

TABLE - II

SCHEMATIC PRESENTATION OF MAJOR METHODOLOGICAL DETAILS

Sr. No.	Objectives	Tools used for data collection	Sources of data
1.	To measure the level of competencies of secondary school educational managers.	- Managerial Effectiveness Scale (MES)	- 40 principal of 40 secondary schools of Baroda city - 6-10 secondary school teachers from each of the 40 secondary schools of Baroda city.
2.	To study the effect of personal variables i.e. age, gender experience, and qualifications on the competencies of educational managers.	- Personal Data Questionnaire	- 40 principals of 40 secondary schools of Baroda city.
3.	To study the factors acting as barriers on the effectiveness of Educational Managers.	- In-depth un-structured interviewing	- 40 principals of the 40 secondary schools of Baroda city.
4.	Case studies on effective principals to find out the reasons for their effectiveness	- Shadowing and observation	- Principals in work situations .- school activities
		- In-depth semi-structured interviewing	- school principals - secondary school teachers - parents - pupils
		- Documentary analysis	- Documents provided by schools - Students exercise books - Official correspondence by District Education Office - Correspondence by parents
		- School profile	- School principals

3.7 DESCRIPTION OF TOOLS

1 MANAGERIAL EFFECTIVENESS SCALE (MES)

The level of competencies of secondary school principals in the organizational context as perceived by the principals and teachers.

In order to study the level of competencies possessed by school principals in the organizational context a number of studies were explored. The available standardized tools/scales/inventories/questionnaires were thoroughally studied. It was observed that most of these instruments were available to study leadership behaviour (LBDQ) organizational climate (OCDQ) value pattens (Pareekh's Farmer's value orientation scale; Upadhya's "Value Test", Chauhan and Arora's value orientation scale etc). All these tools were found to be catering to different areas and objectives and had no utility in the present study. It was therefore thought that a practical scale be developed to study the level of managerial competencies of school principals in the organizational context. The nature of the tool was planned to be a five point scale, to study the principal's own perception (self-rating) and the perception of teachers working under the respective principals whose level of competencies are to be studied.

Collection of competencies

In order to construct a tool for the study of the competencies possessed by school principals in the

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organizational context, as perceived by themselves and their respective teachers, it was essential to understand the basic competencies exhibited by school principals in their routine functioning. The literature on competencies was thoroughally reviewed than a careful scrutiny of competencies exhibited at the work-place was done by interviewing practicing school - principals of Baroda City.

Their opinions on important functional areas, related competencis which they exhibit in their day to day functioning in the different functional areas were collected in a descriptive form. Fifteen practising school principals of Baroda belonging to aided, un-aided and Government. institutions were involved. It was noted that more than 120 items were identified as competencies, it was found that different terminology was used for the same competency areas and competencies and therefore it was pooled together and reduced to 106. The competencies were classified under eight broad functional areas.

Classification of competencies

The competencies possessed by the school principals could be classified into the following eight areas.

1)   Pupil Development

2)   Personnel Management

3)   School-Community Interface

4)   Financial Management

5)   Curriculum Implementation and Management of Instruction

6)   School-Plant and Infrastructure

7)   School-Climate and School Improvement

8)   Administrative Methods and Procedures

A brief description of the eight dimensions have been given below.

Pupil Development : This consists of the overall leadership provided to students, the guidance and counseling offered as and when required. The development of the guide-lines for student conduct and the effective communication of the same. Coping with student indiscipline and ensuring that students maintain neat and clean environment. It includes motivation given to the students and the arrangement of remedial measures for needy students.

Personnel Management : This includes the development of the job-descriptions and fair recruitment procedure by the principal. The induction process and allotment of different task to staff keeping in mind the role-personality congruence. Empowering teachers for participative decision - making and providing recognition to staff. Encouraging teachers for participating in professional development courses for their career advancement and hosting such courses when ever possible and promoting self-development among them. The teachers are encouraged to become members of professional organizations. The principal gives guidance and counsels his staff when needed.

The principal evaluates the on-going school programmes and re-designs them on a regular basis depending on feed - back. The appraisal of staff is carried out and the staff contributes in formulating plans for evaluating and reporting the student's progress. The service records of students and staff are maintained and up-dated. Staff meetings are conducted at regular intervals and the principal communicates with clarity and specificity and shares all relevant information with the staff. Team-spirit is fostered among the staff.

School-Community Interface

This includes the awareness of community needs and initiation of relevant activities to meet those needs. Linkages with government and private organizations are established and two-way relationship between school and community is nurtured. Parents are asked for feed-back, suggestions for improvement of the school. The socio-political problems are effectively handled and community pressures for admissions are withstood. The parents are welcomed and valued and their problems are handled with patience and perseverance. School industry inter face exists and the principal arranges timely and periodical meetings with community leaders. All available resources for the effective management of school-plant is harnessed.

Financial Management

This includes judicious use of financial resources, knowledge of different budgetary procedures and budget preparation for each school activity. It further includes planning for purchase, resource mobilization from the community, organization of fund raising activities and possible ways of savings to be identified.

Curriculum Implementation and Management of Instruction

This includes encouraging continous modification of curricular and instructional procedures. Provision of instructional resources and material to support teaching staff in accomplishing instructional goal, monitoring of instructional processes systematically and continuously and providing feed-back to the teachers for instructional improvement. Knowledge of methods and technique of teaching of different subjects and emphasis on student-centred learning approaches when ever possible. It includes organisation of periodical get - to - gethers to discuss new syllabus and teaching problems and ensuring that pupil's written work is assessed effectively. It also includes planning for educational excursions and different co-curricular activities.

School-Plant and Infrastructure

This includes the continuous appraisal of existing facilities, supervision and maintenance of the school

complex. The adequate stocking of the laboratories and libraries are looked into and the use, care and replacement of capital equipments is ensured. Proposals for the purchase of furniture, laboratory equipments, teaching aids are submitted to the management. It includes supply of equipments and materials, their economic and effective use by staff and the development of library resources and its acess to all users.

School-Climate and School Improvement

This consists of resolving conflicts for a positive and healthy climate and initiation of various programmes and activities for facilitating a caring climate for learning. Existence of a clear vision for the future of the school and sharing of goals by all. Making efforts for improving school climate by taking expert advise.

Administrative Methods and Procedures

This includes following of laid-down proceduces for selection, promotion and termination of teaching and non-teaching staff. The recruitment procedures for scheduled caste and scheduled tribes and procedure for opening of new classes and divisions. Awareness of rules and regulations pertaining to admission criteria and the ability of replying to government queries.

SCORING OF THE MANAGERIAL EFFECTIVENESS SCALE

The Managerial Effectiveness Scale contains five possible responses to each competency statement i.e. 1,2,3,4 and 5. The responses 1,2,3,4 and 5 for Never, Rarely, Sometimes, Often, Very Often respectively. The respondents are supposed to tick or circle any one of the five choices for each statement.

Then the scoring key is used to quantify the information disclosed in the MES. As per the scoring key, item 1-96 were scored as.

Never	Rerely	Sometimes	Often	Very often
1	2	3	4	5

In thse items a tick on `Never' gives the item a score of `1' and ticks on Rarely, Sometimes, Often, Very often gives the items the scores of 2,3,4, and 5 respectively.

The scores of the competency statements of different functional areas will be added separately to reflect the educational manager's competency in that area. The scores will also be computed overall to reflect the educational managers overall competence.

VALIDITY OF THE TOOL

The question of test-validity concerns what a test measures and how well it does so. A test is highly valid if it measures effectively and properly what it is supposed to measure. The validity of the tool was determined in the following way.

Content Validity : The content area of the present tool was systematically analysaed to make certain that all major aspects were adequately covered by the itmes in correct proportions. The 106 competencies identified by the practising principals of Baroda City and review of the literature, were given to 10 experts for validation. These experts included serving principals of aided, unaided and government schools, personnels from District Education Office, retired school principals, experts from Dept. of Education, M.S. University of Baroda and Dept. of Psychology, M.S. University of Baroda.

The experts examined and scrutinized the `Managerial Effectiveness Scale' developed by the investigator in terms of the meaning and definition of each functional area and the relevance of each competency-statement under each area. The language used was also examined for understanding, comprehension and ambiguty. On the basis of the above the competency statements were modifified or deleted. A careful scrutiny of the classifications made by the experts showed that 96 items were to be retained. The opinion of the 10 experts of the field confirmed that the tool was logically valid or had content validity.

2.   PERSONAL DATA QUESTIONNAIRE

Personal Data Questionnaire was developed for collecting biographical information from the principals who were chosen for the study. This questionnaire is expected to

present the information of the principal regarding his/her age, education-academic and professional, experience as teacher and as principal, training received in reputed training institutes like NIEPA, NCERT, foreign institution or any other educational institution; recruitment as principal through Public Service Commission, departmental promotion, open interviews or on SC/ST quota. This will provide the information on the background and personal characteristics of the princiapal chosen for the study.

3.   UN-STRUCTURED INTERVIEW SCHEDULE

This interview schedule was prepared for secondary school principals to study the barriers faced by them. This schedule consisted of eight dimensions i.e. pupil development, personnel management, school-community interface, financial management, curriculum implementation and management of instruction, school-plant and infrastructure, school climate and school improvement, and administrative methods and proceduces.

3.8   PROCESS OF DATA COLLECTION

The Data for the study was collected in two phases :
PHASE - I : The Managerial Effectiveness Scale (MES) was distributed to 40 secondary school educational managers of Baroda city in October 1996 and they were asked to rate themselves. The secondary school teachers (6-10) of each school were asked to rate their respective educational

managers on the same scale. The teachers and the educational managers took 15-20 min. to complete the rating-scale. The administration and the collection of rating scales from the educational managers and the teachers took around four months i.e. Oct. 1996 to January 1997.

In the same phase Personal Data Questionnaires was also distributed to the 40 secondary school educational managers, in order to collect data pertaining to the personal background of the educational managers.

The investigator experienced that the educational managers were serious about filling in the rating-scales and returned it on the time given to the investigator. On the other hand few secondary school teachers forgot, misplaced or even lost the rating scales and a second copy of the scale had to be administered to them.

Them investigator conducted in-depth interviews on the 40 educational managers in the month of February and March'97. An un-structured interview schedule was used to collect data regarding the problems encountered by them in their day-to-day functioning, under different functional areas. The educational managers were many times unable to keep their appointments for the interview due to their busy schedules. Therefore, the investigator had to refix the appointments as per their request.

PHASE - II : Phase II of the data collection process can be seen in detail under `Case Study'.

3.9 TECHNIQUES FOR DATA ANALYSIS

(1)   The level of competencies of 40 secondary school educational managers of Baroda City was found by computing mean scores of teacher's perception about their principals and the principals own perception in the eight competency areas.

(2)   In order to find out the effect of personal variables on the competencies of school educational managers, mean and chi-square were used.

(3)   In order to find out the barriers faced by principals of secondary schools, data was anaylysed qualitatively by content analysis.

3.10 CASE STUDY

This strategy was adopted to get an in-depth understanding and insight of the effective educational managers. It is a case study within a survey (Yin 1984).

The case studies were conducted on the four effective educational managers from November'97 to April '98. The investigator spent forty hours with each principal within a duration of ten days in each school.

1.   SELECTION OF THE EFFECTIVE EDUCATIONAL MANAGERS

This was done in the following manner :

The Managerial Effectiveness Scale (MES) was distributed to 40 secondary school principals of Baroda City and they were instructed to rate themselves. Secondary school

teachers (6-10) of each school were asked to rate their respective principal's competencies on the same scale. The scores of teacher's perception and principal's perception was analysed. The mean score in each competency area of the teacher's rating and the principals self-rating was found separtely. Then the mean score of the total eight competency areas of the teachers rating and the principal's self-rating of each school was tabulated.

TABLE - III

MEAN OF PRINCIPALS' OWN PERCEPTION AND TEACHERS' PERCEPTION ON PRINCIPALS COMPETENCIES IN EIGHT FUNCTIONAL AREAS

SCHOOL	MEAN OF PRINCIPAL'S PERCEPTION	MEAN OF TEACHER'S PERCEPTION	MEAN OF TWO SCORES
1.	432.0	366.1	399.05
2.	426.0	356.0	391.0
3.	417.0	361.2	389.1
4.	411.0	365.6	388.3
5.	444.0	319.9	381.95
6.	402.0	538.6	380.3
7.	433.0	362.8	379.9
8.	423.0	335.16	379.08
9.	415.0	342.5	378.7
10.	390.1	366.9	378.5
11.	449.0	307.8	378.4
12.	408.0	344.6	376.3
13.	376.0	373.1	374.55
14.	352.0	396.0	374.0
15.	403.0	340.3	371.65
16.	371.0	369.2	370.0
17.	406.0	331.4	368.7
18.	441.0	296.3	368.65
19.	382.0	354.2	368.1
20.	343.0	389.3	366.15
21.	314.0	411.0	362.5
22.	387.0	333.7	360.35
23.	364.0	356.7	360.3
24.	402.0	315.1	358.55
25.	386.0	325.8	355.9
26.	394.0	315.1	354.55
27.	412.0	288.3	350.15
28.	429.0	270.0	349.5
29.	414.0	277.16	345.58
30.	338.0	346.4	342.2
31.	387.0	294.6	340.8
32.	316.0	356.4	336.2
33.	352.0	308.5	330.25
34.	332.0	316.1	324.0
35.	312.0	283.6	297.8
36.	337.0	262.3	299.65
37.	301.0	277.8	289.4
38.	231.5	339.0	285.2
39.	413.0	130.1	271.5
40.	275.0	192.5	233.75

The four school principals having the highest competency scores were taken for case-studies as they

indicated the effectiveness of the principals and these principals were characterised as effective by the investigator.

2.   TOOLS AND TECHNIQUES

(I) **Shadowing and Observation** : The effective educational managers were shadowed in their actual work-place thus providing a more authentic environment for a more realistic description of the competencies which characterised them as effective. The investigator observed what was really happening at the school-level and spent about forty hours with each effective principal. The observation was unstructured and helped confirm or contradict issues which arose either in the literature or with the case study principals. The data gathering exercise also involved attending meetings, class-room sessions and other school related activities. The findings obtained by this method were useful to confirm, contradict or augment data gathered by interviews and documents. Vulliamy acknowledges the significance of this method by emphasizing that "what people say in interviews can often by checked out by observation of their practice" (Vulliamy et al 1990).

(II) **In-depth Interviews** : In-depth interviews were conducted on the effective educational managers, their secondary school teachers, student representatives from the student-council and parents. Semi-structured interview schedules based on the issues identified in the objective and those in the field-

work were employed as general interview guides. One to one interviews were conducted.

(III) **Documentary Analysis** : Documentary evidence basically consisted of official and semi-official data. In this study it included circulars, memoranda, minutes of meetings, official correspondence, financial reports, education ordinances, student exercise book etc. Several writers (e.g. Hammersley and Atkinson 1983; Yin 1989) emphasize that documents provide more insights into the programme being studied by cross validating, corroborating and augmenting evidence obtained from other sources.

(IV) **School profile** : In order to collect basic information data of the school, School Profile was developed by the investigator. This profile includes the items which provide information about the following :

(a)   School identification factor includes name of the school, address and year of establishment.

(b)   The pattern of distribution of schools includes the information on type of school, rural or urban, government, aided or unaided, morning or afternoon shift.

(c)   School surrounding includes location of schools near, slums, near busy market or busy road.

(d)   Social class of students incluces upper, middle or lower social class of students, students belonging to families of first generation learners, families not

having much learning traditions and families having good and long learning traditions, students are highly or moderately cultured or uncultured.

(d)   Patterns of facilities available for students provides information about the facilities available with regard to the teaching staff and the infrastructural facilities.

(e)   Class size includes information on number of sections in Xth and XIIth standards, number of students in Xth and XIIth standards and the teacher-pupil ratio in these classes.

(f)   Merit holders in the school includes information on number of distinction holders and position holders in Xth and XIIth standards, shields, prizes etc. bagged by the school in co-curricular activities like debate, quiz, games and sports, painting, knitting, SUPW, Science Exhibition, etc.

(g)   Trend of results provides information about pass percentage, first divisions, second divisions, third divisions, compartments, not appeared and failed for the past three years.

3.   DATA ANALYSIS

The data collected during the case studies conducted on the effective educational managers was analyzed qualitatively by the method of content analysis.