CHAPTER 4
METHODOLOGY

4.0 INTRODUCTION:

In the present chapter, the procedural details of conducting the study are detailed out. This chapter, in a way, is an elaboration of the section on tools and techniques presented in chapter-3. The methodological details have been presented objective-wise, in terms of instrumentation and data collection. It also presents the data processing techniques used.

4.1 INSTRUMENTATION:

The development of tools has been described objective-wise in the following sub-sections.

4.1.1 For Objective 1a:

Objective 1a of the study is to identify the schools which have guidance programmes and those which do not have.

A brief information blank was designed. It included items concerning name of the school, name of the principal, whether the school has guidance services on a regular basis or not, if yes then what type, etc.
Items were developed by the investigator and examined by five experts specialised in the field of guidance and counselling and research methodology. The items were then modified on the basis of suggestions received from the experts. The modified version of the response sheet was used for data collection. The finalised "Information Blank" is presented in Gujarati and English (# Appendix - 7 & 7a).

4.1.2 For Objective 1b:

Objective 1b is to study the reasons for not starting a guidance programme in those schools which do not have one.

The response sheet covering the possible reasons for not starting guidance programme in schools was prepared by the investigator. The response sheet covered 20 questions pertaining to the possible reasons for not starting the guidance programme. In addition, there were also a few items concerning what the schools would do if they intended to start a guidance programme.

These items were then examined by five experts specialised in the field of guidance and counselling and research methodology. The items were then modified on the basis of suggestions received from the panel of experts. Some items
were dropped and others added. The modified version of the response sheet had 15 items pertaining to the possible reasons for not starting guidance service, one item pertaining to attempts to overcome managerial and organisational problems impeding the starting of such a programme, and seven items pertaining to the steps they would take in case they decide to go about starting a guidance programme. This revised response sheet was used for data-collection. The finalised "response sheet" is presented in Gujarati and English (# Appendix - 8 & 8a).

4.1.3 For Objective lc:

Objective lc is to study the type of guidance programmes in those schools which run one.

A questionnaire was constructed. For the construction of items for this questionnaire, the investigator discussed with a team of ten researchers. On the basis of this discussion, the investigator constructed the first draft of the items. They were further sharpened and refocussed on the basis of the investigator's visit to the four respondent schools and observations and interactions therein. The draft questionnaire comprised items pertaining to the factual information about all the aspects of guidance programme, nature and kind of programme, frequency of their
running the programme, the personnel employed and the type of people involved in these programmes and so on.

The draft questionnaire was then examined by five experts specialised in the field of guidance and counselling and research methodology. The items were then modified on the basis of comments, observations and suggestions received from the experts. The finalised questionnaire was then used for data collection. The final form of the questionnaire is presented in Gujarati and English (# Appendix - 9 & 9a).

4.1.4 For Objective 2:

Objective 2 is to study the needs and problems of secondary school students from selected schools, in order to develop an educational and vocational guidance programme.

The students of standard IX classes of the six selected schools were approached by the investigator in the classroom situation. She explained to each group, the importance of guidance and possibility of educational and vocational needs and problems that may be there among children of the secondary schools. Further, the investigator asked all the students in each one of those classes she visited, to write on a blank sheet of paper what they thought were their educational and vocational needs and problems. These open-ended responses were then collected,
sifted through, collated and duplications and irrelevant items were eliminated. (# These open-ended responses of students are presented in Appendix-10). These items were then discussed with the selected sample of teachers and principals of the respondent schools. They were then used for constructing a draft Educational and Vocational Needs and Problems Questionnaire. Pieces from the relevant literature such as Gajjar (1969), Pasricha, Pagdar and Gajjar (1964), Indiresan (1984) and Badami (1974) were referred to for making this draft questionnaire.

The draft questionnaire was then presented before a panel of five judges comprising of experts from the areas of guidance and counselling and research methodology. The comments, observations and suggestions of this panel were then recorded and in the light of them the draft was revised. The revised questionnaire in the form in which, it was used for data collection is presented in Gujarati and English (# Appendix - 11 & 11a). This questionnaire has three parts, viz., vocational needs, educational needs and educational problems. The first part has 13 items, the second part has 28 items and the third part has 62 items, in addition to the personal information blank of the students.

4.1.5 For Objective 3:
Objective 3 is to develop an educational and vocational guidance programme based on the students' guidance needs and problems identified.
As a part of guidance programme, the following psychological tests were administered on the students which served as diagnostic tools.

1. Desai, Bhatt Group Intelligence Test - Verbal (Desai and Bhatt, 1978)
2. Mechanical Comprehension Test (Trivedi, 1971)
3. Bhavsar Numerical Aptitude Test (Bhavsar, 1973)
4. Adjustment Inventory - Adapted from H.M. Bell's Adjustment Inventory (1966, Institute of Vocational Guidance and Selection, Bombay.)
5. Interest Inventory (Mascarenhas, 1966; Institute of Vocational Guidance and Selection, Bombay.)
6. Study Habits Inventory (Patel, 1971)

(# List of psychological tests are presented in Appendix -12.)

4.1.6 For Objective 4:

Objective 4 is to try out the educational and vocational guidance programme thus developed and to find out its effectiveness.

There were two parameters against which the effectiveness of the guidance programme was to be established; they were
ratings by the client students on the various aspects of the programme and the gain in academic achievement that the client students have registered. For the academic achievement, teacher made tests on the various subjects for the final examination of standard VIII and the first term, second term and the final examinations of standard IX were made use of.

For measuring students' ratings on the various aspects of the guidance programme, it was decided that the investigator herself would develop an instrument. Items were first developed by the investigator covering all the aspects of the guidance programme. The items were in the form of those of a five-point rating scale. The items were developed on the basis of informal interactions that the investigator had with the client students while the guidance programme she was conducting under objective 3 was in progress. The draft rating scale was then presented before a panel of judges who were experts in the field of guidance and counselling and research methodology. The opinions, views, comments and observations of the judges were then scrutinised and based on these, the draft rating scale was modified. The modified rating scale was then used for assessing the client-students' ratings about the guidance programme. The modified form of the rating scale has 44 items, covering educational, vocational and Socio-personal aspects of the programme. The final form of the rating scale is presented in Gujarati and English (# Appendix 13 & 13a).
4.1.7 For Objective 5:

Objective 5 is to follow up a few of the students who underwent the educational and vocational guidance programme and probe into the long term effect of the programme on their lives.

The instruments developed for collecting data pertaining to this objective were a short questionnaire and a semi-structured interview schedule. The items in the questionnaire were developed by the investigator from among those aspects which must have had a positive or negative effect on the lives and careers of the client students. The draft questionnaire thus developed were further subject to examination by a panel of five judges comprising of experts in guidance and counselling and research methodology. The semi-structured interview schedule were in the form of discussion triggers pertaining to the various aspects of the biographical elements of the interviewees, which had a bearing to the various aspects of the guidance programme that they had gone through. The semi-structured interview schedule was also scrutinised by the panel of five judges mentioned above. The questionnaire and semi-structured interview schedule modified on the basis of comments and suggestions received from the panel of judges were then made use of for data collection. The
final form of the questionnaire is presented in Gujarati and English (# Appendix-14 & 14a), and the semi-structured interview schedule is presented in Gujarati and English (# Appendix - 15 & 15a).

4.2 PROCEDURAL DETAILS:

The procedural details pertaining to each of the objectives are presented in the following sub-sections.

4.2.1. Pertaining to Objective 1a:

Information Blank was mailed to the 100 secondary schools identified as the population of secondary schools in the city of Baroda and in its industrial suburbs with stamped self-addressed envelopes. With further prompting on telephone to the non-respondent schools, in all, the investigator got responses from 66 secondary schools (which is 66% of the schools contacted). The information collected through this mail survey was then analysed on the basis of the category of school and the status of guidance services, if any, in them.

4.2.2 Pertaining to Objective 1b:

Ten schools were sampled out of the 28 schools which did not have guidance services from among the 66 which responded
to the information blank under objective 1a, as mentioned in chapter 3. Each of these schools were visited by the investigator and the principals were interviewed using the response sheet developed for this purpose as a structured interview schedule. The responses thus received were compiled and collated and processed for identifying the most important factors that impeded the starting of guidance services.

4.2.3 Pertaining to Objective 1c:

All the 4 schools which had full-time guidance counsellors from among the 38 schools which offered guidance programmes and services among the 66 schools which responded to the information blank under objective 1a were selected for data collection pertaining to this objective as mentioned in chapter 3. The questionnaire developed for this purpose was given to the counsellor in each of these four schools. The investigator discussed in detail, the various aspects of this questionnaire with each of the counsellors. The counsellors took their time filling in this questionnaire. The investigator visited the four schools several times to discuss, prompt, and to clarify the various aspects of the filling in of the questionnaire. The information thus collected was collated, and presented as four case studies.
4.2.4 Pertaining to Objective 2:

Six schools were sampled out for this purpose, from among those with no guidance services as described in chapter 3. All the divisions of standard IX, in each of the schools were visited by the investigator. Each class was engaged by the investigator for one period, to elicit open-ended responses from the students. These responses were made use of for constructing the items regarding needs and problems in the questionnaire as elaborated in section 4.1.4. The finalised questionnaire was administered on one sample cluster selected for trying out the guidance programme that the investigator was developing. It took one period for the students, in the sample cluster to respond to the questionnaire. The investigator clarified various points of difficulty that the students had while filling in the questionnaire. The data thus collected were processed.

4.2.5 Pertaining to Objective 3:

The data collected through administering the Needs and Problems Questionnaire were processed and these data became the basis of considering the kinds of inputs that would go into the guidance programme. In addition to these, the conceptual literature in the field had suggested a theoretical framework on which to design a group-based guidance programme. Books like Kochhar S.K.; 'Educational and Vocational guidance in secondary schools' (ed. 1967, ed. 114
1987 & ed. 1990) provided the necessary framework. Further, the investigator had lengthy discussions with the experts in the State Institute of Vocational Guidance, Ahmedabad, who provided the psychological tests, exhibition materials, film-strips, and different kinds of booklets.

The guidance programme that the investigator developed comprised of the following inputs planned to be implemented during July 1987 to April 1988.

List of activities:

1. Administration of Needs Questionnaire (Questionnaire regarding educational and vocational needs & problems)
2. Psychological testing
3. Class talk
4. Discussions
5. Career talks
6. Expert's talk
7. Distribution of Reading materials: Booklets/Pamphlets
8. Exercises of filling up applications, making time-table etc.
9. Question - Answer session
10. Display of relevant information on Notice Board
11. Display of reference books in the Library
12. Film Strips/Slides
13. Exhibition of related materials

14. Field visit

15. Administration of Rating Scale

The plan for the guidance programme in terms of a. nature of programme, b. objectives, c. activities and d. the specific target groups were formulated. This plan is presented in table 4.1 (on page 117 & 118).
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Nature of Programme</th>
<th>Objectives</th>
<th>Activities</th>
<th>Specific Target Group</th>
</tr>
</thead>
</table>
| I      | Vocational Guidance | (1) To help the students in formulating suitable life goals & projecting well balanced life plans. | (1) Career talks : Information about different types of vocations and Occupations to be given to them by the investigator. | All the students of Std. I/I'
|        |                     | (2) To develop an increasing consistency in students in important attitudes. | (2) Career Conference : Career conference to be arranged by the school and talk will be given by specialists. |         
|        |                     | (3) To develop in students a growing system of values or life philosophy. | (3) Students to be taken for visit to the factories and other places which have an importance. |         
|        |                     | (4) To help them with information regarding job placement. | (4) Exhibitions : Related to different types of vocations and occupations, different types of charts and graphs and models to be prepared with the help of students. |         
|        |                     |                      | (5) Information to be displayed through school bulletin and notice board announcements. |         
|        |                     |                      | (6) Related books and reference material : Showing occupational index and monographs concerning numerous occupations and vocations. |         
|        |                     |                      | (7) Motion Picture Films : Showing film strips and films regarding purpose of vocational guidance augmented with discussion, such as current talks on various conditions and problems of living, personal and social problems. This way they will intensify interest and contribute useful information. |         
|        |                     |                      | (8) Related books and reference materials : Showing occupational index and monographs concerning numerous occupations and vocations. |         
|        |                     |                      | (9) Information regarding different types of courses, subjects and streams and technical courses, which are open after S.S.C. and H.S.C., to be given. |         
| II     | Educational Guidance | (1) To give them appropriate information regarding higher education and technical education in Gujarat and in India. | (1) Information regarding different types of courses, subjects and streams and technical courses, which are open after S.S.C. and H.S.C., to be given. | All the students of Std. I/I'
|        |                     | (2) To develop their ability of selecting the academic activities and evaluating experiences directed toward the achievement of tentative academic goals. | (2) Information about library, fellowships, scholarships, etc. to be given. |         
|        |                     |                      | (3) All the above information to be given by : |         
|        |                     |                      | a) Special subject teacher |         
|        |                     |                      | b) Specialist |         
|        |                     |                      | c) Investigator |         
|        |                     |                      | d) Class talks, tutorials and discussions. |         
|        |                     |                      | e) Bulletin board announcements. |         
|        |                     |                      | f) Pupil booklets/school magazine. |         

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<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Nature of Programme</th>
<th>Objectives</th>
<th>Activities</th>
<th>The Specific Target Group</th>
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<tbody>
<tr>
<td>(21)</td>
<td>Node of Studying</td>
<td>(1) To improve learning techniques and the use of books and reference materials.</td>
<td>(1) Special exercises and special talks to be given on study habits.</td>
<td>All the students of Std.IXth-C.</td>
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<td></td>
<td>Program® to be prepared on the learning difficulties of students.</td>
<td>(2) To improve their abilities in relation to reflective thinking.</td>
<td>(2) Specific exercises to be given to improve their reading ability.</td>
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<td>(3) To improve reading ability of students.</td>
<td>(3) Special dictation to be given to improve their speed of writing and about their handwritings.</td>
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<td>(4) To improve their speed of taking down notes.</td>
<td>(4) Suggestions to be given regarding appropriate study habits.</td>
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<td>(5) To improve their ability of giving answers to questions.</td>
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<td>(6) To improve the memory of students.</td>
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<td>(3)</td>
<td>Psychological Testing</td>
<td>(1) To know the students' abilities, interest and intelligence.</td>
<td>(1) Based on performance on different kinds of tests, suitable advice to be given.</td>
<td>All the students of Std.IXth-C.</td>
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<td>(2) Teachers and Parents to be advised appropriately, so that they can deal with the children effectively.</td>
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<td>(3) Report of psychological testing of each student to be made and maintained.</td>
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<td>(4) According to their performance on tests, suggestions to be given to the students, to select the appropriate subjects in S.S.C. and H.S.C.</td>
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<td></td>
<td>1. Desai, Bhatt Group Intelligence Test - Verbal (Desai and Bhatt, 1978)</td>
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<td>2. Mechanical Comprehension Test (Trivedi, 1971)</td>
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<td>3. Bhavsar Numerical Aptitude Test (Bhavsar, 1973)</td>
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<td>4. Adjustment Inventory - Adapted from H.M. Roll's Adjustment Inventory (1966, Institute of Vocational Guidance and Selection, Bombay.)</td>
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<td></td>
<td>5. Interest Inventory (Mascareñas, 1964 Institute of Vocational Guidance and Selection, Bombay.)</td>
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<td></td>
<td>6. Study Habits Inventory (Patel, 1971)</td>
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<td>(4)</td>
<td>Program® for underachievers and problem children</td>
<td>(1) To identify the causes for under achievement</td>
<td>(1) Intelligence test will be administered to know the level of intelligence.</td>
<td>Underachievers and problem children of Std.IXth-C.</td>
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<td></td>
<td></td>
<td>(2) To make diagnosis for the problem children, if any.</td>
<td>(2) The background factors will be assessed through interviews with parents and teachers.</td>
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<td>(3) Detailed case study will be made for the problem children.</td>
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<td>(4) Based on case information, appropriate tests will be administered to have further probing into their problems.</td>
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<td>(5)</td>
<td>Conference of Parents, Teachers, Counselor (Investigator), and Principal</td>
<td>(1) To improve the student's future.</td>
<td>(1) Parent's day</td>
<td>Principal, Teachers, Parents and the Counselor.</td>
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<td></td>
<td>(2) To create interest and awareness among parents for their children.</td>
<td>(2) Conference</td>
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<td></td>
<td></td>
<td>(3) Meetings</td>
<td>(3) Meetings</td>
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<td></td>
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<td>(4) Discussion sessions</td>
<td>(4) Discussion sessions</td>
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Before the above plan was implemented, the students' school records were studied. Thereafter, the psychological testing was done on all 36 students with the help of experts from the State Institute of Vocational Guidance, Ahmedabad. The test results were processed with the help of the above experts, and this information was used as a basis for focussing guidance inputs on various students. With the help of the State Institute of Vocational Guidance, the Parents' Information Form and the Students' Information Form were administered. (# The parents' information form and the students information form in Appendix-16 and Appendix-17 respectively.) The data collected through these were used as a basis for carrying out the programme. The Principal of the school and the teacher in charge were taken into confidence, and in consultation with them, the specific inputs in the guidance programme were planned and implemented month to month. The Physical training periods were permitted by the school authorities to be utilised for implementing the guidance programme. Later on, towards the end of the year, drawing periods were also permitted to be utilized for the implementation of the guidance programme. In all, the programme constituted 48 periods, one or two periods a week. (# The date wise enumeration of activities and record of the students' participation in them are presented in Appendix - 18.) The month to month list of activities undertaken as part of the guidance programme, is presented in table 4.2 as under:

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<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Month</th>
<th>Details about the Programme/Activities</th>
</tr>
</thead>
</table>
| 01.    | July - 1987 | * Investigator started developing the guidance programme.  
* Contacted one Gujarati medium school, i.e. Zenith High school. |
| 02.    | "           | * Met the principal of the school and requested him for cooperation.  
* Obtained the permission from the principal for developing the guidance programme.  
* Principal allotted the class-Std.IXth 'C' for developing the guidance programme. |
| 03.    | "           | * Met the principal, along with the guiding teacher and discussed the plan for the guidance programme.                                                        |
| 04.    | August -1987| * Contacted concerned subject teachers and the students of Std.IXth 'C'.                                                                                         |
| 05.    | "           | * Discussed the needs and problems of students regarding their studies, with the concerned subject teachers.                                                   |
| 06.    | "           | * Explained the concept of guidance, its need and importance at school level to the students.                                                                |
| 07.    | Sept.- 1987 | * Collected personal information of students from their 'Cumulative Record Cards'.                                                                           |
| 08.    | "           | * Administered the 'Educational and Vocational Needs and Problems Questionnaire' on the students.                                                            |
| 09.    | Oct. - 1987 | * Collected final examination result of the students (of Std. VIII 'C').                                                                                       |
| 10.    | "           | * Collected result of the 1st test of Std. IXth 'C'.                                                                                                           |
| 11.    | "           | * Met the principal and discussed the students' performance at the examination.                                                                               |

Contd..2
12-13 Nov. - 1987
* Visited 'State Institute of Vocational Guidance', Ahmedabad.
* Discussed the plan for developing the guidance programme with concerned guidance officers.
* Got assurance regarding their help, whenever a need would arise.

14.
* Informed the principal that the psychological testing of students was fixed with the help of 'State Institute of Vocational Guidance', Ahmedabad.
* Gave information about Psychological testing and its benefits to the students.

15-16
* Administered the psychological tests on the students with the help of personnel from 'State Institute of Vocational Guidance', Ahmedabad.

17.
* Got the 'Students' Information Forms' filled up by the students.

18.
* Got the 'Parents' Information Forms' filled up by respective parents.

19.
* Observed two classes of Std. IXth 'C', i.e. (1) English (2) Mathematics.

* Gave the information about different Universities, various optional subjects under each stream and about degree and diploma courses etc. to the students.

21.
* Gave more detailed information about technical courses, different fields, i.e. Engineering, Technology, Agriculture etc. to the students.
* Displayed booklets, pamphlets and posters regarding different types of courses, occupations/vocations and institutions on notice board, and also put them up in the library.

Contd...3
**Sr. Month**  
**No.**  
**Details about the Programme/Activities**

**22. Dec. - 1987**
* Discussed various topics in the class, such as -
  1. how to improve study habits,
  2. how to use dictionary,
  3. how to make effective time-table for better studies,
  4. how to write answers in the examination,
  5. how to get good marks in the examination.
* At the end of the class, suggestions and guidance were given by the investigator, on the above topics.

**23. "**
* Investigator collected the students' responses to the different aspects of guidance programme on plain paper, i.e. responses to:
  1. Needs and Problems Questionnaire,
  2. psychological testing,
  3. the given information regarding different courses and streams,
  4. the given suggestions regarding improvement of study habits.

**24-25 Jan.- 1988**
* Visited Ahmedabad and collected the result of psychological testing of students from 'State Institute of Vocational Guidance', Ahmedabad.
* With their help, prepared the result sheet of psychological testing.

**26. "**
* Explained the way of writing an application, for which an example, each in English and Gujarati was written on the black board.
* Explained how to fill up prescribed forms of application.

**27. "**
* Gave a demonstration to highlight the effective behaviours needed for facing an interview.

* Discussed the points regarding how to improve hand writings.
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<th>Sr. No.</th>
<th>Month</th>
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<tbody>
<tr>
<td>30.</td>
<td>&quot;</td>
<td>* Collected their result of the IIInd test.</td>
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<tr>
<td>31.</td>
<td>&quot;</td>
<td>* Gave booklets and pamphlets regarding different courses and occupations to the students for reading.</td>
</tr>
<tr>
<td>32.</td>
<td>&quot;</td>
<td>* Gave information about 'Natural Beauty Care', its methods and information regarding different beauty parlours etc. on request of girls students</td>
</tr>
<tr>
<td>33.</td>
<td>&quot;</td>
<td>* Met the principal for arrangement of film shows and exhibition regarding educational and vocational guidance.</td>
</tr>
<tr>
<td>34.</td>
<td>&quot;</td>
<td>* Visited Ahmedabad and borrowed the materials for film shows and exhibition from 'State Institute of Vocational Guidance'.</td>
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<tr>
<td>35.</td>
<td>&quot;</td>
<td>* Showed them different charts related to various courses and occupations for the purpose of career guidance.</td>
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<tr>
<td>36.</td>
<td>&quot;</td>
<td>* Arranged the film shows/film strips/slides regarding various occupations/careers for students.</td>
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<tr>
<td>37.</td>
<td>&quot;</td>
<td>* Arranged a talk on information about &quot;Different Branches and Streams of Technology and Engineering Field&quot; by an expert.</td>
</tr>
<tr>
<td>38.</td>
<td>&quot;</td>
<td>* Arranged career talk on &quot;Educational and Vocational Guidance&quot; for students by vocational guidance officer from 'State Institute of Vocational Guidance', Ahmedabad.</td>
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<tbody>
<tr>
<td>40.</td>
<td></td>
<td>* Did the necessary arrangements for the exhibition.</td>
</tr>
<tr>
<td>41.</td>
<td>March - 1988</td>
<td>* Arranged the exhibition of &quot;Educational and Vocational Guidance&quot; for all students, staff members and principal of both Gujarati and English medium schools.</td>
</tr>
<tr>
<td>42.</td>
<td></td>
<td>* Visited Ahmedabad, 'State Institute of Vocational Guidance' and returned the exhibition materials and film strips/slides.</td>
</tr>
<tr>
<td>43.</td>
<td></td>
<td>* Visited 'Windsor Foods Ltd.' for arranging the field visit for students.</td>
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<tr>
<td>44.</td>
<td></td>
<td>* Met the principal and discussed the arrangement for the field visit.</td>
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<tr>
<td>45.</td>
<td></td>
<td>* Gave the information about field visit to the students.</td>
</tr>
<tr>
<td>46.</td>
<td></td>
<td>* Explained to them the purpose of visit to a work place.</td>
</tr>
<tr>
<td>47.</td>
<td></td>
<td>* Visited 'Windsor Foods Ltd.' along with concerned teachers and students of Std. IXth 'C'.</td>
</tr>
<tr>
<td>48.</td>
<td>April - 1988</td>
<td>* Administered 'Five Point Rating Scale' on students to collect information regarding their opinion about the guidance programme.</td>
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<td></td>
<td></td>
<td>* Collected the result of the final examination of Std. IXth 'C'.</td>
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<td>* Met the parents of Std. IXth 'C' and asked their opinions about the developed guidance programme.</td>
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(# Details of the different types of materials used for developing the guidance programme, are presented in Appendix-19, 20, 21, 22, 23 and 24 respectively.)
4.2.6 Pertaining to Objective 4:

For establishing the effectiveness of the guidance programme, the marks scored by the students in the final examination of standard VIII in April 1987 were collected. Further, their marks in the first and the second term tests of standard IX conducted in August 1987 and January 1988 respectively were collected. Finally, their marks in the final examination of standard IX conducted in April 1988 were collected. These informations were used to calculate the gains in achievement registered by the students.

The rating scale pertaining to the various aspects of the guidance programme which was developed by the investigator was administered on the sample cluster of students in the month of March 1988, after all the inputs of the guidance programme had been given. The scores pertaining to the students' ratings of the programme were processed separately according to the categories, i.e. educational, vocational and Socio-personal. (# The above list of items (category wise) is presented in Appendix - 25.)
The salient features of the Educational and Vocational Guidance Program developed by the Investigator*. (They are, the Objectives, Base line, Components, Strategies and Evaluation.)

OBJECTIVES

- To guide the students in choosing their optional subjects and streams for their further studies.
- To help them in solving their problems regarding their studies.
- To improve their study habits.
- To help them in making time-table for a systematic study.
- To improve their handwriting.
- To improve their skill of writing the answers in the examination.
- To improve their skill of writing an application and of filling the prescribed forms of application.
- To improve their skill of facing an interview.
- To make them aware about different educational courses and streams, different institutions and universities and different career options in different fields.
- To give them more information about various government jobs and different departments of defense etc.
- To give an idea about work places (industrial environment).
- To help them in knowing about themselves, i.e., about their intelligence, abilities, aptitudes and interests.

BASE LINE

- Needs and Problems of Students
- Opinions of Principal, Teachers, and Parents
- Responses of the students
- Suggestions of personnel from 'State Institute of Vocational Guidance', Ahmedabad.
- Reference Books

COMPONENTS

- Administration of Needs and Problems Questionnaire
- Psychological testing
- Class talk
- Discussions
- Career talks
- Expert's talk
- Distribution of Reading materials: Booklets/Phampletes
- Exercises of filling up applications, making time-table etc.
- Questions - Answer session
- Display of relevant information on Notice Board
- Display of reference books in the Library
- Film Strips/Slides
- Exhibitions of related materials
- Field visit
- Administration of Rating Scale

STRATEGIES

- Techniques of Group guidance

EVALUATION

Comparison of academic performance of students, before and after the programme (1)
(2) By administering Rating Scale on students
(3) Studying the long term effect of the programme on selected students, after 5 years & 6 months of completion of the try out of the guidance programme.
4.2.7 Pertaining to Objective 5:

For probing into the long term effect of the guidance programme on the lives of the students who had gone through it, the questionnaire which was developed for this purpose was mailed to all the students in the sample cluster on their residential addresses after five years and six months of completion of the guidance programme, that is in October 1993. Out of 33 students to whom the questionnaire was mailed, 5 responded. The information that they gave were analysed qualitatively.

Two of these respondents were selected and they were visited by the investigator and detailed interviews conducted with them. The interviews were recorded and transcripts were prepared. (# The transcripts for {one boy and for one girl} are presented in Appendix-26 and Appendix-27 respectively.) Further, the information collected were processed qualitatively and presented as case studies.

4.3 Problems faced by the investigator during the study:

Although, most of the activities were carried out pertaining to the guidance programme, as mentioned in the "Plan for the guidance programme (See page no. 117 & 118), there were
few activities which could not be carried out as the investigator had to face certain problems during the development of guidance programme.

These problems were as under:

1. It was not possible to carry out all the activities as planned, due to time constraint and lack of facilities available in the school.

2. Most of the teachers and parents were not aware of the guidance services.

3. Even after briefing them about the guidance programme, they were not ready to co-operate in the programme.

4. And due to the above reasons, the investigator could not administer Rating Scale on teachers and parents.

5. The programme for underachievers and problem children mentioned in the plan (See page no. 11) could not be conducted as all the children in the class were normal and none could be identified as an underachiever or a problem child.
4.4 DATA PROCESSING AND ANALYSIS:

Most of the data collected were of qualitative nature, whereas some of the data were of quantitative nature. Analysis of qualitative data was carried out by the investigator in descriptive form on the basis of her field observations. Analysis of quantitative data was carried out in terms of frequencies, percentages, ranks, means and standard deviations. The analysis and interpretation of the data are presented in chapter 5.
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