

CHAPTER IV

RESEARCH APPROACH AND METHODOLOGY

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4.1 Research Approach

In the present study a mixed approach was followed considering the complex phenomenon under investigation. Mostly it could be called as a descriptive study in the sense that, the researcher has tried to describe the total phenomenon of ASOP as it is currently in practice in the ASCs. Description is focussed on conditions that exists, opinions that are held, processes that are going on and impact that are evident with regard to ASOP. However, the present study was not designed to determine the effectiveness of the ASOP in terms of the achievements of its pre-determined objectives but to estimate the degree to which it has served to its clintele who have been exposed to it and what its clintele feel about the relevance of the programme, its organisation and impact. The conclusion and recommendation in such studies though dispensable it is generally deducible from the prima facie evidences collected through the process of inquiry and the collected responses from the subjects of the study in the form of some implied judgement about the relevance and satisfactoriness of the situation, hence, the conclusions were deduced and recommendations were made in the present study.

From another angle, the study was more predisposed towards collection of data retaining their normal subjective

characteristics in a systematic manner than to purposively trying to quantify the data in a premediated and objective manner. However, quantification was not totally avoided and nor was it desirable to avoid so far as the present study is concerned. Furthermore, for all the objectives except objective-5 the data collected were either in nominal form or those were arranged and classified into discrete categories for the purpose of analysis. In case of objective-5, the quantitative measurement was taken to study the participants' perception of ASOC. Thus, both qualitative and quantitative approaches were followed in the present study.

4.2 The Nature and Sources of Data

To meet the objectives of the study it necessitated collection of varied data about the ASOS and ASCs in general and ASOP in particular. The objective-1, required collection of informations regarding the number of orientation programmes conducted in different ASCs and the number of teachers attended these programmes since the inception the scheme.

The objective-2 and a part of the objective-4, necessitated collection of factual data about infrastructural facilities, available, human resources, financial status, course timings, instructional methods followed, evaluation mechanisms employed in the ASCs.

The objective-3 required collection of opinions about the need of orientation course form the teachers who attend such courses organised in the ASCs.

For objective-4, the opinions and reactions of the participants and the directors of ASCs were collected about the appropriateness of the course duration, course contents, methods of instruction (orientation), instructional (reference) materials, assignments and evaluation process.

The objective-5 required objective and measurable response from the participants about their overall perception of ASOC.

The objectives 6 and 7 necessitated factual informations regarding the problems faced by the participants and the problems faced by the ASCs.

The objective-8 required collection of specific and to the point reactions of the participants about the impact of orientation course on them.

The objective - 9 required collection of opinions of the directors of ASCs about the success of ASOP.

Finally, the objective-10 necessitated collection of suggestions from the participants and the directors of ASCs regarding the improvement of the orientation programme.

Accordingly the sources of data for the present study were the following:

- i) Reports and documents pertaining to ASOS and ASCs viz. UGC document and guidelines on ASOS and ASCs (1987, 1993) report of the review committee on ASC (1991), reports of the review meeting of directors (NIEPA, 1991, 1992 and 1993) and annual reports of the individual ASCs.
- ii) The functionaries of the ASCs, like the directors/deputy directors/assistant directors, course coordinators and the resource persons.
- iii) The teachers who participated in the orientation programmes (usually referred as participants).
- iv) The physical structure of ASC itself.

4.3 Sample and Population

Sampling procedures followed in the present study were different for each of the objectives. Therefore, the details of sampling is given in the subsequent paragraphs according to the objectives of the study.

In case of objective-1, the progress of ASOS was studied upto the year 1994. At the time of the conception of the study it was thought of to study the progress only upto the year 1993. This otherwise meant the terms of reference for the study of progress of ASOS was taken as five years from 1988 to 1993. However, in the course of the study one

more year (i.e. 1994) was added as the term of reference. Thus, the years taken as the terms of reference to study the progress of the ASOS are the legitimate units of sample in this context.

To study the status, practice and problems of ASCs (objective 2, 4 and 7) it was initially decided to cover the whole population of ASCs (which were 45 in number then). Accordingly informations were sought from all the ASCs, but inspite of all the efforts put forth by the investigator the data could be collected only from 18 ASCs. Thus the previous plan of study of the total population was forcedly reduced to a sample study and consequently it could be treated as the incidental sampling. It may be noted here that, the sample of 18 ASCs is about 40 percent of the total number of existing ASCs and these 18 ASCs were again represented 16 states (viz. Andhra Pradesh - 1, Assam - 1, Bihar - 1, Gujarat - 1, Haryana - 1, Kerala - 1, Madhya Pradesh - 1, Maharashtra - 1, Orissa - 1, Pondicherry - 1, Punjab - 1, Tamil Nadu - 1, Uttar Pradesh - 3, and Delhi - 3).

In case of objective-3, to assess the training (orientation) needs of the teachers in higher education the data were collected from 240 teachers who at one time joined in the orientation courses conducted by those ASCs (Seven in number) included in the sample of the study. It may be mentioned here that, seven ASCs were randomly selected for

making indepth inquiry about the different aspects of ASOP as necessitated by objective - 2, 4, 5, 6, 7, 9 and 10 in addition to objective -3. Seven ASCs selected in the sample of the study are: ASC, Aligarh Muslim University; ASC, Goa University; ASC, Jawaharlal Nehru University; ASC, Kurukshetra University; ASC, Poona University; ASC, Saurashtra University; and ASC, Utkal University which constitute about 16 percent of the total number of ASCs in India. It may be noted here that while presenting the findings of the study the actual names of ASCs are substituted with pseudo or code names like, A, B, C, D, E, F and G (but not in the same order as the names of ASCs cited above) to protect their identity.

Thus, these 240 teachers could be treated as the sample incidentally selected and they may truly represent the population of fresh and newly appointed lecturers in colleges and universities to a considerable extent. However, the study does not make any deterministic presumption in this context about generalizations of the observations and responses made by the sample of teachers.

For objectives 4, 5, 6, 7, 9 and 10 the informations and responses were collected from 18 directors and 240 teachers (who joined as the participants in orientation programme), hence they form the sample in the context of the above referred objectives. Moreover, 30 resource persons were also contacted in those seven ASCs at the same time

when participants were contacted for collection of data regarding participants' behaviour (in objective 7).

In the specific context of participants' difficulties pertaining to boarding and lodging facilities (objective-6) the data were collected from 187 participants who availed such facilities in ASCs.

In case of objective 8, the data were sought from all the 240 teachers who constituted the sample of the study in general. But, only 175 teachers responded amongst them and they consequently constitute the sample in the specific context of objective 8.

On the whole, from a technical point of view the sample of the present study depending on its objectives were limited to seven ASCs from different part of India, 18 directors (or Dy. Director or Asst. Director) of ASCs, 240 teachers who were attending the programme then and 30 resource persons. It may be noted here that the sample of 240 participant teachers represented a cross sections of institutions of higher education throughout the country. Categorically stating, these 240 teachers were from 16 states/ union territories and 34 universities (see Appendix-I for exact representation of participant teachers from states/UT and universities). So far as their other backgrounds are concerned there were:

- i) 28 Ph.D. degree holders, 66 M.Phil. degree holders and 146 (only) Master's degree holders;

- ii) 162 teachers from Arts (including Social Sciences) faculty, 48 from Science faculty and 30 from Commerce faculty;
- iii) 216 teachers teaching at undergraduation level and 24 at post-graduate level;
- iv) 232 teachers working in different colleges and 8 in different universities;
- v) 84 teachers having teaching experience upto 4 years, 148 of them having 5 to 8 years of experience and 8 having more than 8 years of experience;
- vi) 126 teachers upto 30 years of age, 100 of them in 31-40 years range and 14 of them above 40 years;
- vii) 178 male and 62 female teachers;
- viii) ASC-wise, there were 28 participants in ASC-A, 32 participants in ASC-B, 31 participants in ASC-C, 42 participants in ASC-D, 36 participants in ASC-E, 36 participants in ASC-F and 35 participants in ASC-G.

4.4 Tools of Data Collection

Keeping in view the objectives of the study following tools were prepared by the investigator for the collection of data:

- i) A questionnaire for the directors of ASCs.
 - ii) A questionnaire for the participants of ASOP.
 - iii) A perception of ASOC scale for the participants.
 - iv) A rating scale for the resource persons.
 - v) A post-orientation reaction questionnaire for the
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- participants.
- vi) Interview schedule for the directors and participants.
 - vii) Observation check-list.

4.4.1 Questionnaire for the Directors

To meet the requirements of objective 1, 2, 4, 7, 9 and 10 a questionnaire-cum-response sheet was prepared for the directors of ASCs. The questionnaire was designed mainly to collect factual informations about the status of ASCs, the details of organisation of ASOC and details of the problem faced by the ASCs. However, it also contained such items where the directors were asked to give their ratings, express opinions and suggestions.

So far as the constructions of the questionnaire were concerned at the first place, a list was prepared covering the various aspects of ASOS, ASOP and ASCs about which the directors were the source of information. The items were prepared according to this list. After preparing the pool of items those were arranged in a logical sequence to make it convenient for the respondents to respond.

The prepared questionnaire then was referred to a few experts in the field of higher education including some directors of the ASCs to ascertain its appropriateness and validity. The items were further modified on the basis of the feedback received from the experts. (The other general rules followed for the preparation of questionnaires is

mentioned elsewhere in this section).

The final form of the questionnaire for the directors contained total 37 items as per the following specifications:

- i) Factual informations were sought in 25 items (viz. item Nos.1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 24, 27, 28, 29, 32, 33, 34 and 36) and these items were of both close ended and open ended type.
- ii) There were 12 items of both open and closed ended type to collect the opinions and ratings of the directors about the various aspects of ASOS, ASOP and ASC (e.g. item Nos.7, 9, 18, 19, 22, 23, 25, 26, 30, 31, 35 and 37).

A specimen copy of the questionnaire is attached in the Appendix section (See Appendix A).

4.4.2 Questionnaire for the Participants

A questionnaire was prepared for the participants following the same steps as mentioned for the director's questionnaire keeping in view the requirements of the objectives 3, 4, 6 and 10. The final form of the questionnaire had the following features:

- i) There were total 32 items organised under six sections: Basic Informations (Item Nos.1-10); Need of Orientation (Item Nos. 11-13); Enrollment Problem (Item Nos. 14-15);

Relevance of Curriculum (Item Nos.16 & 17); Duration of the Programme (Item Nos.18 & 19); Reading Materials (Item Nos 20-24); Instructional Process (Item Nos 25-29); and Amenities Provided (Item Nos 30-32).

- ii) Factual informations were sought in 15 items (Viz. Item Nos.2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 20, 23, 28 and 31).
- iii) Sixteen items were dealing with the opinions and feelings of the participants about different aspect of ASOP and ASCs (e.g. Item Nos.12, 13, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, 27, 29, 30 and 32).
- iv) Items were both close and open ended type (for the specimen copy of participants questionnaire see Appendix B).

4.4.3 Perception of ASOC Scale

To study the overall feelings of the participants regarding the orientation programme, 'perception of ASOC scale' was prepared by the investigator. The scale was designed on the model of Likert type scale with summated scoring procedures. Specific steps followed in the construction of scale were:

- i) A series of statements implying both positive and negative feelings were framed.
- ii) Each statement was framed in such a way to carry a single idea and was either in positive or negative form.

- iii) The statements were then arranged in a logically sequential order.
- iv) The statements were referred to some experts for judging of its clarity and appropriateness.
- v) The rough scale thus prepared was tried out on a sample of 30 participants (of one ASC) and on the basis of their response, item analysis was made.
- vi) Item analysis was done by following 'Item - total' correlation method. i.e, by correlating the score on one item with the total score on the rest of the items. The items which yielded a coefficient of correlation of 0.80 or above were retained for the final version of the scale.
- vii) After item analysis, out of total 19 items framed initially 14 items were retained for the final version of the scale.
- viii) After item analysis the scale was again referred to the experts for ensuring its face validity.

The final version of the scale, considered of 14 items in the form of declarative statements: 8 positive and 6 negative followed by 5 alternatives each (viz. SA - strongly Agree; A - Agree; UD - Undecided; D-Disagree; and SD- Strongly Disagree).

The scoring procedure for the scale was same as it is usually followed in case of Likert type scales. The positive statements were to be scored as 5, 4, 3, 2 and 1 depending

on the exact response made by the subject in the continuum of strongly agree to strongly disagree and the negative statements were to be scored in exactly reversed manner (i.e. 1,2,3,4,5 instead of 5,4,3,2,1). The total score thus, obtained by a subject was considered as the indicator of his/her perception of ASOC. For meaningful interpretation of the result the following value levels were fixed:

| | | |
|------------------|---|------------|
| Scores 63-70 | : | Very good; |
| Scores 49-62 | : | Good |
| Scores 36-48 | : | Neutral |
| Scores 22-35 | : | Poor |
| and Scores 14-21 | : | Very Poor |

It may be noted here that one can get a maximum score of 70 and a minimum of 14 in this scale.

4.4.4 Rating Scale for the Resource Persons

A rating scale was used to elicit the response of resource persons regarding the participants' involvement in the orientation programme (for the specimen copy of the rating scale see Appendix D).

4.4.5 Post-Orientation Reaction Questionnaire

To collect data regarding the impact of orientation programmes on the teachers participated in it, a post-orientation reaction questionnaire was prepared by the investigator. The steps involved in the construction of this

questionnaire were similar to the steps described in case of director's questionnaire.

There were total 14 questions included in this questionnaire and all the questions were close ended in which the subjects were supposed to indicate their response either in 'yes' or 'no' form.

4.4.6 General Rules Followed in Questionnaire Construction

The following general rules were followed for the construction of different questionnaires:

- i) Item banks were separately prepared for each of the questionnaire;
- ii) Items were scrutinized for overlapping of ideas and ambiguity;
- iii) Closed ended items were supplemented with suggested alternatives as far as possible;
- iv) Precautions were taken to make it as brief and as compact as possible by avoiding unnecessary items and including those items pertinent to the stated objectives of the study;
- v) Though the questionnaires (including the perception of ASOC scale) were prepared for the exclusive use in the present study care was taken to improve the validity and reliability of these tools. To ensure the validity the questionnaires were referred to panels of experts as specified earlier. Regarding estimation of reliability the questionnaire for the directors,

participants and the perception of ASOC scale those were administered in relatively small groups of subjects in each category (i.e. director and participant) for the second time. The responses thus collected were matched with responses of actual administration of the questionnaire and it was found that more than 80 percent of responses were exactly similar. It may be noted here that the reliability estimation was not taken for the post-orientation reaction questionnaire for the teachers participated in orientation programmes.

vi) All the questionnaires and the perception scale were prepared in consumable booklet format. The respondents were supposed to mark their response on the questionnaires itself.

4.4.7 Interview Schedule for the Directors

Semi-structured interview schedule was prepared to interview the directors pertaining to those aspects of ASOS and ASOP which were not included in the questionnaire and if included then for the purpose of further indepth enquiry. Some structured questions asked to the directors are enlisted in Appendix E. The outcome of the interviews were promptly recorded by the researcher in his field trip diary.

It may be noted here that some participants were also interviewed by the investigator but these interviews were unstructured type. These interviews were considered

necessary from the angle that one may feel little open and informal to talk about those aspects what he/she otherwise would not have done while putting it into the paper.

4.4.8 Observation Check-list

To report the status of ASCs though the directors questionnaire used as the main tool it was supplemented with the investigators own observation of the ASCs and the organisation of orientation courses in the ASCs in natural setting. To make the observation focused the investigator prepared a check-list similar to the items listed in the director's questionnaire pertaining to factual informations about ASCs and ASOP. The purpose of this observation was more to determine the accuracy and consistency of the data supplied by the directors, in response to the mailed questionnaire.

4.5 Procedure of Data Collection

At the first stage of data collection the questionnaire for the directors were mailed to all the 45 ASCs with a request to return it by a month or so. After a gap of one month, reminders were sent alongwith another set of questionnaire to those ASCs from which response was not received. Total five times reminders were send to ASCs till the actual analysis of data began. But as mentioned earlier the data could be procured from 18 ASCs only.

In the second phase, the investigator worked out an itinerary for the field visit to seven ASCs selected in the sample. The schedule was prepared after taking the consent from the concerned directors and taking into consideration the programme schedules of different ASCs. The ASCs were visited during the last week of an orientation programme in progress.

The participants' questionnaires were administered to the participants on the first day of the last week of the orientation programme with a request made to them to return it within 2-3 days. The day before the last day of the orientation programme the perception of ASOC scale was administered and collected back on the same day.

During this phase, the investigator interviewed the directors. The participants were also interviewed during the breaks of orientation sessions. Moreover, the resource persons were also contacted during this period and requested to give their ratings regarding participants' involvement in orientation sessions conducted in the prescribed format (Appendix-D). Besides, the investigator surveyed the physical facilities of ASCs and the manner in which orientation sessions were conducted by the resource persons.

In the third and final phase of data collection, the post-orientation reaction questionnaires were mailed to the teachers who had participated in the orientation programme. The questionnaires were mailed to the teachers after six

months of their attendance of orientation programme and they were requested to return it by a week of its receipt. Those who had not returned the questionnaires in time were reminded once more by sending another copy of questionnaire. Finally the investigator could get back 175 questionnaires with valid responses.

It may be noted here that, collection of necessary data from the reports were simultaneously done alongwith the different phases of data collection.

4.6 Data Processing and Analytic Techniques

After collection of data, seperate code sheets were prepared for the transferring of raw responses from the questionnaires. The responses given by the subjects to the closed ended items of the different questionnaires were entered seperately following suitable coding procedures into the data sheet for computerized analysis of data.

Similarly the data collected through the open ended items and interviews were seperately compiled in different data sheets for the purpose of analysis.

So far as analysis of data is concerned those were mainly analyzed by categorizing, counting frequencies and calculating percentages. The investigator used the statistical (computer) Software SPSS PC ++ (for descriptive statistics eg. 'sorting', 'frequency count' and 'Crosstab')

for the analysis of above referred data in case of the objectives, 3,4,6,8 and a part of 9.

In case of objective-5 , as the data were available in the form of scores in interval scale those were analyzed by using statistical techniques like ANOVA and t' test for testing of hypotheses formulated earlier. In this context also the investigator used SPSS PC ++ (Inferential Statistics for ANOVA and t' test). It may be noted here that the graphs were prepared by using "Harvard Graphics" computer software.

The descriptive informations collected through the open ended items in questionnaires and from the interviews were content analzsed, categorized and in some cases reduced to frequency distributions. Certain statements made by the subjects were also reproduced as it is to highlight one's genuine feelings without altering its natural appeal.