CHAPTER V

SUMMARY, FINDINGS AND CONCLUSION

Introduction

In India, quality improvement programme gained momentum in the mid 1950s soon after the publication of report of the University Education Commission (1948-49) dealing with the various aspects of teaching-learning and evaluation processes at the university level which emphasised the need for their improvement. The Committee on Evaluation of Standards of University Education (1965), and the Education Commission (1964-66) also recommended the need for initiating programmes for bringing about qualitative improvement in teaching-learning and evaluation processes at the university level. The teaching departments in the universities have been established for strengthening teaching-learning and evaluation processes at the post-graduate level and research work. Certain teaching departments in the universities have been designated as Centres of Advanced Study in different disciplines for the promotion of research. The University Grants Commission (1973, 76) drafted 'A Plan of Action' for bringing about reform in examination system, the main components of which were internal assessment, question bank, credit system and grade system. The universities were encouraged for the adoption of semester system with the purposes of having flexibility in courses of study, methods of teaching and evaluation. The affiliated colleges and university

teaching departments were encouraged and liberally financed for setting up of Instruments Maintenance and Servicing Centres for developing psychomotor skills among the students. Certain other qualitative improvement programmes such as establishment of examination reform cells in the universities, college autonomy, assistance for writing quality books at the university level, teacher-fellowship, Orientation courses for university college teachers, COSIP, COHSSIP etc. have been initiated by the University Grants Commission.

The University Grants Commission initiated College Science Improvement Programme (COSIP) in 1970-71 and the College Humanities and Social Sciences Improvement Programme (COHSSIP) in 1974-75 for bringing about qualitative improvement in teaching-learning and evaluation processes in Science, Humanities and Social Sciences at the undergraduate level in the colleges. These programmes have been taken up at two levels : (i) in selected colleges to include the entire Science, Humanities and Social Sciences faculty; (ii) University Leadership Project (ULP) in any one of the Science, Humanities and Social Sciences subjects in all the colleges affiliated to a university. A variety of activities were to be initiated under COSIP and COHSSIP such as introduction of new methods of instruction, development of instructional material, enrichment of library facilities with advanced books and journals, provision of practical orientation in disciplines, organisation of guest lectures, arrangement for remedial teaching programme for academically weaker students, provision of special programmes for gifted students,

development of question bank, introduction of internal assessment, introduction of job-oriented courses, publication of news bulletin etc. The initiation and experimentation of these programmes would ultimately lead the institutions to the revision, modernisation and updating of syllabi. The colleges were supported with adequate financial assistance for organising academic activities, enriching libraries with advanced books and journals, equipping laboratories with advanced equipment and appointing teaching assistants for supporting instructional activities. The University Leadership Project (U.L.P) in COSIP and COHSSIP aimed to provide assistance to selected colleges for conducting academic activities successfully. The investigation is aimed to find out the present position of activities of COSIP and COHSSIP with their effectiveness in the selected colleges of India. Hence, the title of the problem is : 'A STUDY OF COSIP AND COHSSIP SPONSORED BY THE U.G.C. IN SELECTED COLLEGES OF INDIA.'

Objectives of the Study

The following are the objectives of the study :

1. (a) To study the objectives of COSIP and COHSSIP as accepted by the teachers.

   (b) To study the emphasis laid on the accepted objectives of COSIP and COHSSIP for their attainment by the teachers.

2. (A) To study the present position of COSIP and COHSSIP with regard to their specified aims and objectives :

   (a) Instructional process :

      (i) methods of instruction ;
      (ii) instructional material ;
      (iii) practical orientation in discipline ;

(iv) guest lectures ;
(v) remedial teaching programme for academically weaker students; and
(vi) special programmes for gifted students.

(b) Evaluation procedure :

(i) question bank ; and
(ii) internal assessment

(c) Syllabus :

(i) revision, modernisation and updating; and
(ii) job-oriented courses

(d) News bulletin

(e) Library facilities

(B) To study the teachers' perception of effectiveness of activities organised under COSIP and COHSSIP as mentioned in 2 (A).

(C) To study the existing accommodation facilities for conducting teaching-learning process.

3. To study the students' reactions towards the effectiveness of activities organised under COSIP and COHSSIP.

4. To study the problems faced by the principals in the implementation of COSIP and COHSSIP.

5. To study the utilisation of funds granted to the institutions for the implementation of COSIP and COHSSIP.

6. To study the trend of students' achievement in Science, Humanities and Social Sciences at the undergraduate level after the introduction of COSIP and COHSSIP.

Delimitations of the Study

1. The study is delimited to COSIP and COHSSIP in selected colleges located in various parts of India.

2. The University Leadership Project (ULP) in COSIP and COHSSIP has not been taken up for the study.
3. The study is confined to the students in final year in Science, Humanities and Social Sciences at the undergraduate level in the Colleges.
4. The study takes into account the teachers who were teaching at the undergraduate level in the institutions prior to and after the introduction of COSIP and COHSSIP.

Methodology and Procedure

The study employed the descriptive survey method of research. The study was designed in the following sections :

1. Stages of conducting the study
2. Sample
3. Instrumentation
4. Data Collection
5. Analysis and Interpretation of the Data

1. Stages of Conducting the Study : The study has been conducted in three stages :

Stage I : The original proposals sent by the colleges to the University Grants Commission highlighting the various activities to be organised under COSIP and COHSSIP with subsequent changes made therein and their annual progress reports about the programmes were obtained through mailed letters. The percentage of colleges which sent their original proposals and annual progress reports pertaining to COSIP and COHSSIP was 51.30 and 56.35 respectively. The collected material was scrutinised thoroughly for finding out commonalities in activities.

Stage II : The investigator visited 7 COSIP and 5 COHSSIP colleges for collecting the benchmark data pertaining to the

the organisation of various activities under the respective programmes, to come in contact with the personnel involved in the programmes (principals, teachers and students) and for observing various activities in process.

Stage III : The final data were collected by the investigator in person through field survey technique by coming in contact with the personnel involved in COSIP and COHSSIP through the questionnaires, substantiating the data interviewing them based on the items in the questionnaires, as and when found necessary, and observing various activities in process.

Sample

A purposive sample of principals, teachers and students was drawn from the randomly selected colleges where COSIP and COHSSIP were continuing. The number of colleges having COSIP, COHSSIP, as well as COSIP and COHSSIP together selected for the study were 9, 8 and 4 respectively. The principals' role was studies as an administrator as well as a teacher. The number of principals as administrators selected for the study was 21 (one from each college).

The teachers who were teaching at the undergraduate level in Science, Humanities and Social Sciences in the institutions prior to and after the introduction of COSIP and COHSSIP were selected for the study. The number of teachers (including principals as teachers) selected from the colleges for studying COSIP and COHSSIP was 146 and 127 respectively.

The students in final year in Science, Humanities and Social Sciences at the undergraduate level who were involved in COSIP and COHSSIP were randomly selected from each college. The number of students selected for study of COSIP and COHSSIP was 260 and 240 respectively.

Instrumentation

The investigator developed 4 tools (a checklist and three questionnaires) for studying the objectives of the study, 1, 2, 3 and 4. The data pertaining to the objectives 5 and 6 were collected from the college office records. The tools developed by the investigator are mentioned below:

(i) A checklist was developed for studying the objectives of COSIP and COHSSIP as accepted by the teachers and emphasis laid on the accepted objectivesf for their attainment by them (for objective 1).

(ii) A questionnaire was developed for studying the realisation of objectives of COSIP and COHSSIP by the teachers. It aimed at to collect the data pertaining to present position of COSIP and COHSSIP with regard to their aims and objectives; teachers' perception of the effectiveness of activities organised under the programmes and existing accommodation facilities for conducting teaching-learning process (for objective 2).

(iii) Another questionnaire was developed for studying the students' reactions towards the effectiveness of activities of COSIP and COHSSIP (for objective 3).

(iv) The third questionnaire was developed for studying the problems faced by the principals in the implementation of COSIP and COHSSIP (for objective 4).

. Data Collection

(i) The data pertaining to the objectives of study 1, 2, 3, and 4 were collected with the aid of the developed tools. The tools were administered on the sample by the investigator personally visiting the colleges selected for COSIP and COHSSIP. The respondents filled in the questionnaires and were interviewed based on the items of the questionnaires for substantiating the data the responses to which were noted by the investigator. The investigator observed certain activities organised under COSIP and COHSSIP in process and collected relevant information for substantiating the data collected through questionnaires and interviews.

(ii) The college office records were consulted for collecting the data pertaining to the utilisation of funds in implementing COSIP and COHSSIP (for objective 5).

(iii) Annual university examination results of the students in the final year at the undergraduate level in Science, Humanities and Social Sciences after the introduction of COSIP and COHSSIP were obtained by consulting college office records to meet the demands of objective 6 of the study.

. Analysis and Interpretation of the Data

For studying the objectives 1, 2, 3, 5 and 6 the data were sorted out programmewise i.e. (i) COSIP and (ii) COHSSIP. For studying the objective 4, the data were classified in three categories i.e. colleges having (i) COSIP, (ii) COHSSIP, and (iii) COSIP and COHSSIP together. The statistical techniques used for processing the data are discussed in brief hereunder :

(i) The checklist and all the three questionnaires were analysed itemwise. The responses were presented in terms of percentages, ranks and mean scores according to the need of the items.

(ii) Teachers' perception and students' reactions towards the effectiveness of activities of COSIP and COHSSIP were determined in terms of mean scores. The levels of effectiveness of activities were studied against the mean values by taking the exact limits on the 5-point scale according to the following considerations :

5	-	4.45	to	5	-	To a great extent
4	-	3.45	to	4.44	-	To much extent
3	-	2.45	to	3.44	-	To some extent
2	-	1.45	to	2.44	-	To a little extent
1	-	1.00	to	1.44	-	Not at all

(iii) Percentage analysis was done for studying the utilisation of funds granted for the implementation of COSIP and COHSSIP.

(iv) Graphs were plotted for studying the trend of students' achievement in Science, Humanities and Social Sciences at the undergraduate level after the introduction of COSIP and COHSSIP.

Major Findings of the Study

1.1 Acceptance of Objectives of COSIP and COHSSIP

1.1a Hundred percent teachers of COSIP and COHSSIP accepted the following objectives of the respective programmes:

(i) to introduce new methods of instruction in the classroom as well as in the laboratory ;

(ii) to enrich library with relevant advanced books and journals and to make best use of it ; and

(iii) to develop self-study habits among the students.

1.1b The teachers of COSIP and COHSSIP belonging to the disciplines in which laboratory activities were involved accepted the objectives : to introduce new experiments for changing laboratory activities; and to provide more opportunities to students for independent laboratory activities.

1.1c The majority of teachers of COSIP and COHSSIP accepted the following objectives of the respective programmes :

(i) to develop instructional material;

(ii) to make optimum use of common facilities such as stationery, cyclostyling and audio-visual equipment;

(iii) to provide opportunity to students for practical orientation in discipline;

(iv) to introduce internal assessment ;

(v) to devise special programmes for gifted students to enable them to develop their innate talents ;

(vi) to start interdepartmental and intercollegiate programmes for uplifting education at the undergraduate level ; and

(vii) to send teachers to advanced learning centres for refresher courses.

1.1d The objective : to extend the programme for guest lectures has been accepted by 46.58 percent of teachers of COSIP and 58.27 percent of teachers of COHSSIP respectively.

1.1e The objective : to establish workshop in order to design and assemble equipment for fabricating new apparatus for supporting instructional programme, has been accepted by 47.95 percent of teachers of COSIP only.

1.1f The objectives : to make efforts to enrich, modernise and update the syllabus; to develop question bank in each discipline containing objective type, short answer type and essay type questions; to design and set tests according to new techniques of examination; and to make arrangement for remedial teaching programme for academically weaker students have been accepted by a low percentage of teachers of COSIP and COHSSIP.

1.1g The objective : to introduce job-oriented courses within the framework of existing curriculum has been accepted by a low percentage of teachers of COSIP only.

1.2 Emphasis laid on Objectives of COSIP and COHSSIP for Their Attainment in Order of Priority

1.2a The teachers of COSIP gave priority to the following ten objectives of the programme for their attainment. The objectives are sequenced in their rank order hereunder :

(i) to enrich library with relevant advanced books and journals and to make best use of it ;

(ii) to develop self-study habits among the students ;

(iii) to introduce new methods of instruction in the classroom as well as in the laboratory.

(iv) to introduce new experiments for changing laboratory activities (4.5) ;

(v) to provide more opportunities to students for independent laboratory activities (4.5) ;

(vi) to start interdepartmental and intercollegiate programmes for uplifting education at the undergraduate level ;

(vii) to send teachers to advanced learning centres for refresher courses ;

(viii) to introduce internal assessment ;

(ix) to make optimum use of common facilities such as stationery, cyclostyling and audio-visual equipment etc.; and

(x) to develop instructional material.

1.2b The teachers of COHSSIP gave priority to the following ten objectives of the programme for their attainment. The objectives are sequenced in their rank order :

(i) to enrich library with relevant advanced books and journals and to make best use of it ;

(ii) to introduce new methods of instruction in the classfoom as well as in the laboratory (2.5) ;

(iii) to develop self-study habits among the students (2.5) ;

(iv) to make optimum use of common facilities such as stationery, cyclostyling and audio-visual equipment etc.;

(v) to develop instructional material ;

(vi) to send teachers to advanced learning centres ;

(vii) to start interdepartmental and intercollegiate programmes for uplifting education at the undergraduate level ;

(viii) to introduce internal assessment ;

(ix) to devise special programmes for gifted students to enable them to develop their innate talents; and

(x) to extend the programmes of guest lectures.

2. Realisation of Objectives of COSIP and COHSSIP

2.1 Methods of Instruction

(i) Lecture method was practised by 100 percent teachers of COSIP and COHSSIP prior to and after the introduction of programmes. 63.01 percent of teachers of COSIP and 77.17 percent of teachers of COHSSIP adopted the practice of supplying duplicated material to students in advance in connection with class lectures. The duplicated material contained definitions, statements of educationists, formulae, deviation of formulae, diagrams, graphs,sketches, tabulated data, bibliographical notes, lecture abstracts etc. The students' preparation based on duplicated material for the class was frequently assessed by the teachers of COSIPs in comparison to teachers of COHSSIP. The teachers of COSIP and COHSSIP adopted the techniques of probing questions and inviting queries for assessing students' preparation for the class. The duplicated material was found to be helpful in promoting the habits of library consultation among the students to a considerable extent.

(ii) The projection of lecture on the screen through visual aids has not become popular.

(iii) The majority of teachers of COSIP (76.71 percent) and COHSSIP (65.35 percent) followed the practice of giving assignments to the students. Assignment method was adopted by 21.91 percent of teachers of COSIP and 18.11 percent of teachers of COHSSIP after the introduction of the programmes. Generally, the assignments were given once in a month to the students. 41.78 percent of teachers of COSIP preferred to ask objective type, short answer type and essay type questions in assignments to the students whereas, the teachers of COHSSIP preferred to ask short answer type and essay type questions in assignments. The students followed the practice of submitting assignments to teachers after completion. The practice of correcting assignments with written remarks and then discussing them with the students was widely accepted by the teachers of COSIP and COHSSIP. The assignments were perceived to be of much help to the students in developing in them the habits of self-study and answering specifically to the point by the teachers of COSIP and COHSSIP. However, the students did not come up to the expectations of the teachers to express independently in the assignments.

(iv) Seminar method was adopted by 56.85 percent of teachers belonging to COSIP and 44.09 percent of teachers of COHSSIP after the introduction of COSIP and COHSSIP. This method was not in practice prior to the introduction of the programmes. 17.81 percent of teachers of COSIP and 33.86 percent of teachers of COHSSIP followed the practice of organising seminars based on class lectures. Seminar sessions were normally chaired by the teachers. The proceedings of seminar sessions were recorded byt the students. The practice of supplying duplicated material pertaining to the topic in seminars was not regularly observed. Seminars under COHSSIP were characterised by greater participation of the members in discussions in comparison to participation in COSIP.

(v) The majority of teachers of COSIP (60.96 percent) and COHSSIP (66.93 percent) followed the practice of conducting tutorials. The tutorial method was adopted by 21.92 percent of teachers belonging to COSIP and 55.12 percent of teachers of COHSSIP after the introduction of COSIP and COHSSIP. Tutorials were conducted once in a week. The majority of teachers of COSIP and COHSSIP reported the number of students in tutorials to be between 11 and 25. Tutorials were conducted based on class lectures. There were 15.95 percent of teachers of COSIP and 18.90 percent of teachers of COHSSIP who conducted tutorials to discuss students' personal problems besides, their academic difficulties.

(vi) Group discussion method was adopted by 7.53 percent of teachers of COSIP and 51.18 percent of teachers of COHSSIP after the introduction of the programmes. This method was not in practice prior to the introduction of COSIP and COHSSIP. 7.53 percent of teachers of COSIP and 33.86 percent of teachers of COHSSIP followed the practice of organising group discussions once in a month. The unit of time devoted to group discussion sessions was of one hour duration. Meritorious students were preferred for group leadership in group discussions. The group discussion sessions were not strictly confined to the topics; liberty was provided to the students to introduce new ideas from other disciplines when such a step promised to be fruitful.

(vii) Symposium as a method of instruction was adopted by 14.17 percent of teachers of COHSSIP only after the introduction of the programme. This method was practised once in a month. The unit of time devoted to symposium was of an hour duration. The average number of students who used to attend symposia were between 26 and 50. Three papers were to be presented in symposia and the students were free to supplement the content of the papers with short speeches. Discussion sessions were conducted after the presentation of papers on short speeches in symposia.

(viii) The teachers of COHSSIP perceived the effectiveness of discussion methods (seminar, tutorial, group discussion and symposium) in

enabling the students to learn the subject as well as in developing in them certain values and skills to a great extent in comparison to the teachers of COSIP. The teachers belonging to both the programmes agreed that discussion methods were helpful to the students in clarifying difficult topics to an appreciable extent. The teachers of COHSSIP found the effectiveness of discussion methods to students in developing the power of expression and in supplementing class lectures to an appreciable extent.

(ix) Workshop activities were started by varying percentage of teachers of COSIP only. 47.95 percent of teachers provided opportunities to students in workshops for preparing charts, models, diagrams, sketches, etc. ; 28.08 percent of teachers provided opportunities to students for repairing and improvising the apparatus; 12.33 percent of teachers provided opportunities to students for designing and assembling equipment for new apparatus and 29.25 percent of teachers provided opportunities to students for operating electrical gadgets. The workshop activities were conducted once in a week. The unit of time devoted to workshop activities was of two periods continuously of the college time table. The average number of students was reported between 11 and 25 while conducting workshop activities. The workshop activities were found helpful to students in developing in them the skills of construction, operation, servicing and maintenance of apparatus to a considerable extent.

(x) Project method was found to be widely practised by a very high percentage of teachers of COSIP (91.10 percent) whereas, it has been practised by a limited percentage of teachers of COHSSIP (22.05 percent). While the COSIP projects were mostly concerned with the verification of hypotheses or laws, the COHSSIP projects were mostly surveys. There were teachers of COSIP and COHSSIP who followed the practice of discussing project work with the students once in a week and once in a

fortnight. Oral instructions were provided to students at every step for conducting the projects. The projects were finalised after ensuring that the students have explored the sources of information for conducting the projects. The teachers of COSIP perceived the project method of greater help in training the students to employ scientific procedure for solving the problems and studying the phenomena in their natural settings in comparison to the teachers of CCOHSSIP.

(xi) Only 6.30 percent of teachers of COHSSIP reported about the facilities of language laboratories in their departkents. These teachers belong to English language only. Three colleges established fullfledged language laboratories which have the capacity of twenty students each and two colleges procured recorded material. The teachers followed the practice of supervising students' learning through language laboratory in terms of improvement of pronunciation, pacing, new words, fluency and appropriateness of words. The language laboratory was found helpful to students in improving their communication skills to a considerable extent.

(xii) Laboratory activities were conducted by 63.70 percent of teachers of COSIP and 5.51 percent of teachers of COHSSIP (Geography and Psychology disciplines). They provided opportunities to students to conduct laboratory activities independently. The unit of time devoted for laboratory activities was more than one hour, specifically two periods continuously of the college time table. There were teachers of COSIP who reported the number of students in laboratory activities to be between 11 and 25, and between 26 to 50. The teachers of COSIP and COHSSIP were on the whole satisfied about the students' abilities and skills for performing laboratory activities independently. In case of some specific tasks such as checking the working conditions of the apparatus and tools; setting up apparatus with ease; performing experiments

with neatness and tabulating observations meaningfully, the teachers belonging to both the programmes have given high ratings for students abilities and skills.

2.2 Library and Audio-Visual Aids

(i) Libraries have been enriched in terms of advanced books and, revised editions under COSIP and COHSSIP. Part time attendants have been employed in the libraries. Inadequacy of journals has been observed by the majority of the teachers belonging to both the programmes which was due to their high cost. The teachers of COSIP reported adequate seating capacity for the students whereas, the majority of teachers of COHSSIP reported inadequate seating capacity with respect to students' strength. The majority of teachers of COSIP (71.23 percent) and COHSSIP (85.87 percent) reported the non-existence of departmental libraries. The factors responsible for the non-existence of departmental libraries were : lack of accommodation; lack of library assistant; and lack of funds. Open access system in the library was not found to be popular at the undergraduate level. The teachers of COSIP and COHSSIP perceived that the students made use of library facilities for consulting advanced literature to a considerable extent. They also perceived that the students made use of library resources in preparing project reports/revising discussion papers to a great extent.

(ii) A very high percentage of teachers of COSIP (91.78 percent) reported the availability of charts, maps, diagrams, sketches, models in their departments whereas, the availability of such instructional material was reported by only 33.86 percent of teachers of COHSSIP. The availability of teaching aids such as films, filmstrips, slides, cassette tapes, sound records etc. was reported by a low percent of teachers of COSIP and COHSSIP. The audio-visual aids were not frequently used for supporting instructional activities.

The percentage of teachers of COSIP who reported the availability of audio-visual equipment for displaying audio-visual aids such as film projector, slide projector, overhead-projector, epidiascope, tape-recorder was greater than the percentage of teachers of COHSSIP. While making use of audio-visual aids, the teachers of COSIP and COHSSIP followed the practice of making introductory comments in advance; explaining the meaning of new words; and reviewing key points at the end of the session. The practice of conducting follow-up activities of the use of audio-visual aids was not found popular. The audio-visual aids were found to be of a limited help to the students for their learning purposes.

2.3 Accommodation Facilities

It was found that 54.12 percent of teachers of COSIP and 51.18 percent of teachers of COHSSIP did not feel handicapped with regard to accommodation facilities for delivering lectures. There were 56.85 percent of teachers of COSIP and 52.76 percent of teachers of COHSSIP who did not feel handicapped with regard to accommodation facilities while conducting the discussion method (tutorial, seminar, symposium and group discussion). However, there were quite considerable percentage of teachers of COSIP and COHSSIP (more than 40 percent) who felt handicapped by shortage of accommodation facilities for delivering lectures and conducting group discussions effectively. During interviews, most of the teachers suggested that in programmes like COSIP and COHSSIP there should be some provision for funds for physical development of the colleges.

2.4 Field Trips

The field trips were organised at different locations based upon the nature of disciplines by the varying percentage of teachers belonging to COSIP and COHSSIP. The teachers belonging to

Chemistry, Physics and Mathematics discipline preferred to organise field trips to laboratories of national importance, instrumentation centres and industrial centres whereas, the teachers belonging to Zoology, Botany and Micro-biology disciplines preferred to organise field trips to botanical gardens and nearby ponds or seashores. The teachers belonging to COHSSIP preferred to organise fieldtrips to rural areas, social service centres, places of historical importance, commercial centres and industrial centres. Normally, the field trips were organised once in a year. The teachers of COSIP who organised field trips found them productive to a greater extent in terms of varied learning experiences gained by the students in comparison to the teachers of COHSSIP. The field trips were perceived to be helpful to students in gaining experiences about the advancements in the discipline to an appreciable extent.

2.5 Guest Lectures

The guest lectures were organised by 46.58 percent of teachers of COSIP and 58.27 percent of teachers of COHSSIP. Under COSIP, the guest lectures were organised in disciplines such as Chemistry, Physics, Zoology and Botany whereas, in COHSSIP the guest lectures were organised in English and regional languages, Sociology, Economics, Psychology, History, Geography etc. The programme of guest lectures had a limited impact on students' learning. It may be due to unstructured nature of guest lectures and lack of students' interest.

2.6 Remedial Teaching Programme

The remedial teaching programme was organised by a very low percentage of teachers of COSIP (13.01 percent) and COHSSIP (15.76 percent). The very objective of COSIP and COHSSIP of initiating remedial teaching programme at the undergraduate level was not met with success. A very low percentage of teachers of COSIP and COHSSIP who organised remedial teaching programmes found them helpful to a considerable extent for academically weaker students in overcoming their deficiencies. The academically weaker students were benefitted from the programme of individual coaching outside the class to a great extent.

2.7 Special Programmes for Gifted Students

The majority of teachers of COSIP entrusted the responsibility to gifted students for developing instructional material, making arrangement of field trips and organising departmental seminars whereas, the majority of teachers of COHSSIP entrusted the responsibility to gifted students for making arrangement of field trips and organising guest lectures. The teachers of COSIP and COHSSIP found that the gifted students contributed to a considerable extent for making the special programmes a success. They agreed that the gifted students contributed to an appreciable extent; for developing instructional material; and for operating electrical gadgets.

2.8 Evaluation Procedure

(i) The question bank was developed by 23.29 percent of teachers of COSIP and 16.53 percent of COHSSIP. A very low percentage of teachers of COSIP and COHSSIP indicated that the very

purpose of developing question bank in each discipline did not become an accomplished reality. Objective type, short answer type and essay type questions were framed for the question bank. Staff members of the college in the discipline were the main contributors of questions ee for the question bank. 19.18 percent of teachers of COSIP and 6.30 percent of teachers of COHSSIP analysed the items of the question bank in terms of difficulty level and discriminatory value. The items of the question bank were not regularly revised. The teachers of COSIP and COHSSIP followed the practice of supplying questions ffom the bank to the students at the end of the course. The question bank was found helpful to the students in acquiring better study skills and greater confidence in appearing at examinations to an appreciable extent.

(ii) The internal assessment system was followed by the majority of teachers of COSIP (76.72 percent) and COHSSIP (65.35 percent). There were 21.92 percent of teachers of COSIP and 18.11 percent of teachers of COHSSIP who instituted the certificate of their own institutions for the award of internal assessment. The major activities conducted for internal assessment were assignments, periodic tests and quizzes. The internal assessment facilitated the assessment of students' performance in a continuous manner. The teachers of COSIP and COHSSIP found the internal assessment to be helpful to students in improving their grades or marks to a great extent.

2.9 Revision of Syllabus

A low percentage of teachers of COSIP (38.36 percent) and COHSSIP (33.08 percent) reported that their departments made an effort to revise the syllabus. The important objective of COSIP and COHSSIP to make efforts to revise, modernise and update the

syllabi did not receive the due attention. The majority of teachers of COSIP and COHSSIP stated : 'We are not authorised to revise and modernise the syllabus. It is the responsibility of the university'. The teachers of COSIP and COHSSIP who attempted to revise the syllabus mentioned that staff-members of the college in the discipline were the main participants in syllabus revising committee. The syllabus revised by the autonomous colleges got approved by the university for implementation in a shorter duration in comparison to other affiliated colleges. Only 18.49 percent of teachers of COSIP and 22.83 percent of teachers of COHSSIP reported that the concerned universities accepted more than 75 percent of the revised syllabus. The teachers were satisfied with the revised syllabus to a limited extent. They suggested that fundamental changes were required in the traditional curriculum which would be possible only through a series of planned changes.

2.10 News Bulletin

The publication of news bulletin from the participating colleges in COSIP and COHSSIP has not become popular. Only 19.18 percent of teachers of COSIP and 25.98 percent of teachers of COHSSIP reported that their institutions started to publish news bulletins in their discipline. The news bulletins were published annually. The teachers and students of the participating institutions were the main contributors of articles/project reports for publication in news bulletins. Only 19.18 percent of teachers of COSIP and 23.62 percent of teachers of COHSSIP mentioned that the language of publication of news bulletin was English.

News bulletin was
/ found helpful to students in cultivating in them higher intellectual abilities and skills for understanding the language of and contributing articles to the standard journals to a considerable extent.

2.11 Job-oriented Courses

Job-oriented courses were initiated by 21.23 percent of teachers of COSIP only. There was no provision of diploma for the award of such job-oriented courses. The job-oriented courses here referred to application oriented learning experiences provided to the students in different disciplines. The application-oriented learning experiences were provided to students in Physics, Chemistry, Zoology and Botany disciplines. Such experiences were found to be of a limited help to students in developing confidence in them to meet vocation oriented requirements.

2.12 Miscellaneous Items

The COSIP and COHSSIP facilitated the students to improve their marks/grades and to get them position in the university final examination to a considerable extent. However, during interviews, it was pointed out that the programmes could not improve the overall pass percentage of the students of the college. The COSIP and COHSSIP have not been found of much help to students in preparing them for competitive examinations such as I.A.S., I.P.S., Engineering, Banking etc and in getting jobs.

3. Inhibiting Factors Experienced by the Teachers in Implementing COSIP and COHSSIP

During the informal and unstructured interviews, the teachers belonging to COSIP and COHSSIP pointed out a few problems experienced

by them in implementing the programmes. The problems are :

1. Heavy workload on the teaching staff.
2. Lock of incentives to teachers either in terms of promotion, increment, or recognition for organisation of various activities under COSIP and COHSSIP.
3. Lack of professional skills amongt the teachers for adoption of modern techniques of evaluation.
4. Lack of interest among the students in coming forward for participation in various activities beyond the university prescribed syllabus.
5. Existent pattern of affiliating type of universities.
6. Lack of academic autonomy to teachers for initiation of various activities under COSIP and COHSSIP.
7. Lack of physical facilities for organising various activities under COSIP and COHSSIP.
8. Poor teacher-student ratio.

4. Students' Reactions Towards the Activities of COSIP and COHSSIP

4.1 The students of COSIP found the duplicated material helpful in having easy access to library resources and in supplementing the class lectures to an appreciable extent whereas, the students of COHSSIP found its helpfulness to a considerable extent.

4.2 Assignments were found to be helpful to the students of COSIP and COHSSIP to a considerable extent in developing the habits of answering specifically to the point and in promoting self-study habits in them.

4.3 Discussion methods (seminar, tutorial, group discussion and sumposium) were found to be of a considerable help to the students of COSIP and COHSSIP in developing in them

higher intellectual abilities and skills of interactive learning. They agreed that the discussion methods provide them opportunities to supplement class lectures and to discuss difficult topics to an appreciable extent.

4.4 Workshop activities were found to be of an appreciable help to the students of COSIP in developing in them the skills of construction, operation, servicing and maintenance of apparatus.

4.5 The majority of students of COSIP and a low percentage of students of COHSSIP gained experience in completing small research projects in their disciplines. The students of COSIP found the small research projects helpful in adopting scientific procedure for solving the problems to an appreciable extent whereas, the students of COHSSIP found its helpfulness to a considerable extent.

4.6 The students of COSIP were found to be utilising library facilities for consulting advanced literature to a greater extent in comparison to the students of COHSSIP.

4.7 The audio-visual aids were found to be of a limited help for learning purposes by the students of COSIP and COHSSIP.

4.8 The majority of students of COSIP and COHSSIP gained experience of field trips in their disciplines. They found field trips helpful in gaining varied learning experiences in their disciplines to an appreciable extent.

4.9 Guest lectures were found to be of a limited help to the students of COSIP, whereas, the students of COHSSIP were deriving considerable benefits from them.

4.10 A low percentage of students of COSIP and COHSSIP were benefitted by the question bank in their disciplines. They found question bank helpful to an appreciable extent in studying the subject-matter in depth and in becoming familiar with the pattern of questions in the examinations.

4.11 The students of COSIP and COHSSIP found the internal assessment helpful in getting their performance assessed continuously through diversified activities to an appreciable extent. They found that internal assessment helped them in reducing undue emphasis on the final examination to a considerable extent.

4.12 A low percentage of students of COSIP and COHSSIP responded to the items relating to the revision of syllabus. They did not find significant changes in the revised syllabus, but only certain modifications and alternations.

4.13 The items pertaining to news bulletins have been responded to by 26.15 percent of students of COSIP and 21.25 percent of students of COHSSIP. They found news bulletin helpful in cultivating the habits of reading scientific news and papers and also in training them in preparing papers for publication to a considerable extent.

4.14 A low percentage of students of COSIP who responded to the items of job-oriented courses found them helpful to a little extent in getting orientation towards vocations.

4.15 Only 12.50 percent of students have been benefitted by the language laboratory. They found that the language laboratory is helpful to them in improving their communication skills to a considerable extent.

4.16 The items pertaining to laboratory activities have been responded to by 100 percent students of COSIP and 8.33 percent of students of COHSSIP. They found themselves able in making use of acquired skills of performing laboratory activities independently to a considerable extent.

4.17 Only 19.23 percent of students of COSIP and 17.50 percent of students of COHSSIP have been benefitted by the remedial teaching programme. They found that the remedial teaching programme was helpful to them in coping with the classroom teaching to a considerable extent.

4.18 The gifted students under COSIP and COHSSIP have been invited to participate in advanced academic activities, organisational tasks and manipulative works. The gifted students under COSIP and COHSSIP contributed towards the success of special programmes to a considerable extent. They contributed in developing instructional material and in making arrangement of field trips to an appreciable extent.

5. Problems faced by the Principals in Implementing COSIP and COHSSIP

The most severe problems faced by the principals in implementing COSIP, COHSSIP, and COSIP and COHSSIP together are listed below in their rank order :

1. The U.G.C. does not disburse the grants in time.
2. The teachers expect remuneration for doing extra work.
3. There is a lack of motivation among the teachers for organising various activities.
4. The students are more examination oriented and, hence offer little cooperation for non-graded activities.
5. There is an unsatisfactory teacher-student ratio.
6. There is a lack of motivation among the students for participating in various academic activities.
7. The university's rigid curriculum does not allow the introduction of any innovative activity.

6. Utilisation of Funds for the Implementation of COSIP and COHSSIP

6.1 The majority of colleges which implemented COSIP (7 out of 12) and COHSSIP (7 out of 11) were not able to make full use of grants received from the University Grants Commission. It indicated the lack of proper planning of the institutions for initiation of innovative activities and lack of enthusiasm in implementing the programmes.

6.2 The colleges having COSIP utilised greater percentage of expenditure for academic growth of students than the colleges having COHSSIP. Office equipment such as typewriter and duplicating machine have been procured under COSIP and COHSSIP. The colleges paid honoraria to teaching staff for extra work out of COSIP funds which was against the policy of U.G.C. whereas, the colleges under COHSSIP appointed tytors for extra work and paid out of COHSSIP funds. A meagre amount of COSIP funds was utilised for staff development programmes by the colleges whereas, the colleges having COHSSIP did not utilise any amount for this purpose.

7. Students' Achievement in Science, Humanities and Social Sciences at the Undergraduate Level after the Introduction of COSIP and COHSSIP

The significant impact of the COSIP and COHSSIP was found in the increase of number of first divisioners and fall in the number of third divisioners in Science, Humanities and Social Sciences at the undergraduate level in the colleges. However, in the majority of colleges have COSIP (7 out of 13) and COHSSIP (7 out of 11) the overall students' pass percentage has gone down after the introduction of the programmes.

Conclusion

The University Grants Commission initiated COSIP in 1970-71 and COHSSIP in 1974-75 for bringing about qualitative improvement in teaching-learning and evaluation processes in Science, Humanities and Social Sciences at the undergraduate level in the colleges. The COSIP and COHSSIP provided opportunities to the teachers to initiate varied instructional activities and motivated them to

participate in curriculum planning. The programmes tried to prepare the institutions to accept the challenge of academic autonomy. The COSIP and COHSSIP were introduced in selected colleges of India. The present investigation aimed to find out the present position of activities initiated under COSIP and COHSSIP. It also answered a few questions raised in the beginning of the study, and at the same time provoked certain issues.

The study revealed that changes were effected in various aspects of academic activities in the colleges with the introduction of COSIP and COHSSIP. The progressive methods of instruction such as assignments, seminars, tutorials, group discussions, symposia, workshop activities and project work were adopted by the varying percentage of teachers of COSIP and COHSSIP. These methods of instruction were found of significant help to students in developing their intellectual powers and in enabling them to learn the subject-matter. Field trips were organised for providing varied learning experiences to the students and their utility was testified significantly. Guest lectures were found of a limited help to the students of COSIP and COHSSIP. Gifted students were invited to participate in advanced academic activities, and in organisational and manipulative tasks. The gifted students contributed to the success of special programmes to a considerable extent. The internal assessment was found to be of much help in assessing students' preparation continuously through diversified activities.

The activities which were initiated by a limited percentage of teachers of COSIP and COHSSIP were : remedial teaching programme

for academically weaker students ; question bank and publication of news bulletin. The audio visual aids were found of a limited help to the students of COSIP and COHSSIP for their learning purposes. The syllabus was not revised and modernised to a marked extent. Much efforts had not been made for providing vocation-oriented experiences to the students.

The laboratories have been equipped in terms of advanced instruments and apparatus out of COSIP and COHSSIP funds. Libraries have been enriched in terms of advanced books and recent editions. Office equipment such as typewriters and duplicated machines were procured out of COSIP and COHSSIP funds. The colleges under COSIP paid remuneration to the teaching staff for extra work whereas, the colleges under COHSSIP appointed tutors for supplementing extra work and paid out of COHSSIP funds. However, the majority of colleges which implemented COSIP (7 out of 12) and COHSSIP (7 out of 11) were not able to make full use of the grants for implementation of the programmes received from the U.G.C. These colleges showed lack of proper planning for initiation of innovative activities and lack of enthusiasm in implementing the programmes.

The significant impact of the COSIP and COHSSIP was found in the increase of the number of first divisioners and fall in the number of third divisioners in Science, Humanities and Social Sciences at the undergraduate level. However, in majority of COSIP (7 out of 13) and COHSSIP (7 out of 11)

colleges, the overall students' pass percentage has gone down after the introduction of the programmes.

The inhibiting factors experienced by the teachers and principals in implementing COSIP and COHSSIP were : heavy work load on teaching staff; lack of incentives to teachers either in terms of increment, promotion or recognition for organising various activities under COSIP and COHSSIP; lack of professional skills among the teachers for adoption of new techniques of evaluation; lack of motivation among the students for participation in various activities organised under COSIP and COHSSIP; poor teacher-student ratio; lack of physical facilities; existent affiliating type of universities etc. Besides these problems, the principals of COSIP and COHSSIP colleges experienced much difficulty in receiving grants from the U.G.C. at the appropriate time.

From the above discussion, two crucial issues emerges. They are :

1. Some of the progressive colleges made significant achievements in various academic activities under COSIP and COHSSIP such as introduction of new methods of instruction in the classroom as well as in the laboratory; provision of practical orientation in discipline; arrangement for guest lectures; provision of special programmes for gifted students ; introduction of internal assessment etc. The libraries have been enriched in terms of advanced books and journals. The laboratories have been equipped in terms of advanced and sophisticated equipment and apparatus. But one of the significant revelations is that all the participating colleges have not been benefitted

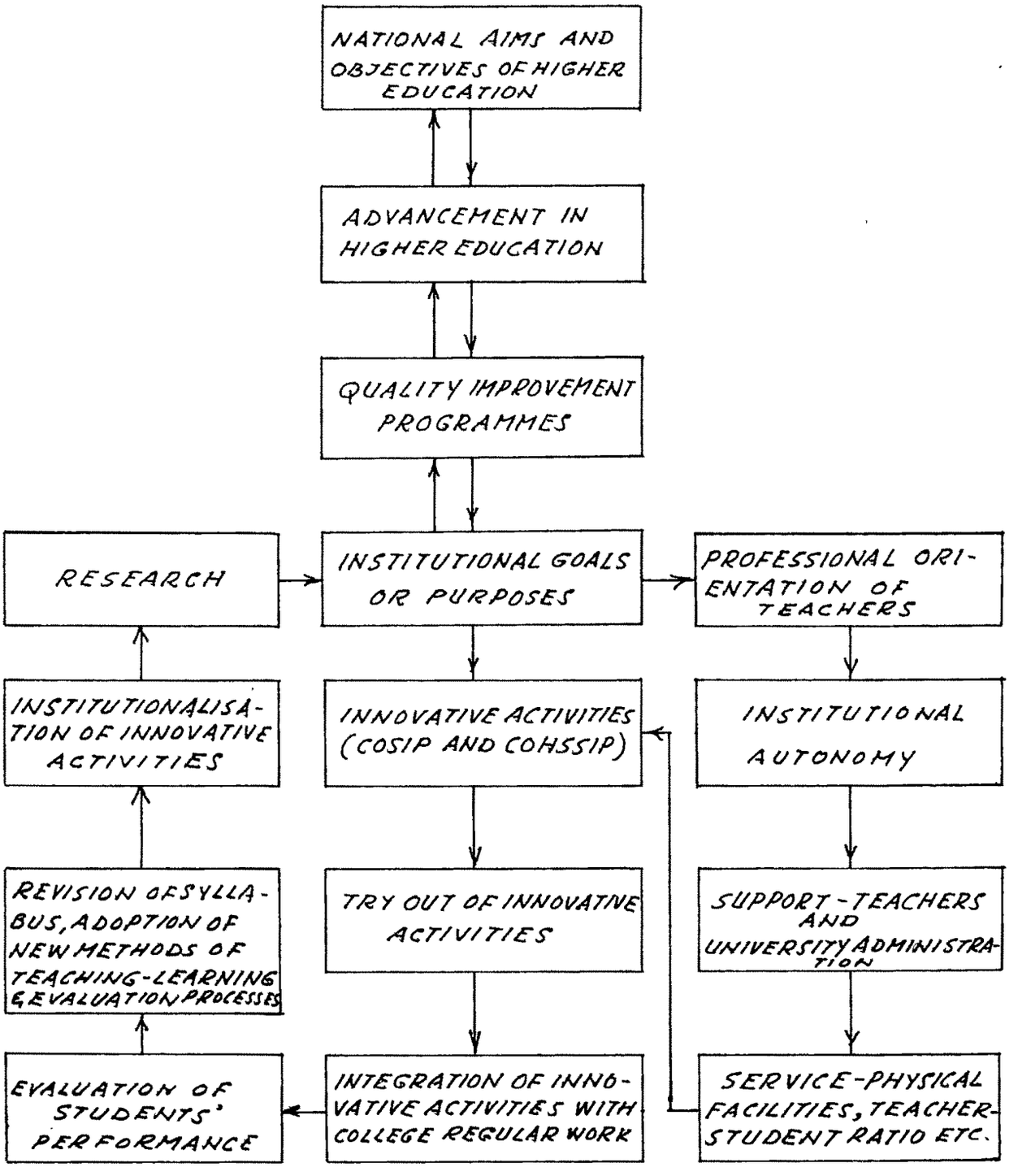
from COSIP and COHSSIP equally. The success of the programmes depends upon a number of factors such as commitment of the teachers and their competency to execute the programme effectively, support from the college and university administration, participation of students in various academic activities etc. Such factors have been emerged out from the present investigation which needs further verification.

2. Another important issue arises, whether more colleges are to be invited for participation in COSIP and COHSSIP ? Whether the programmes need modifications and revision ? The experiences of the past years, as indicated by the study show that some modifications are needed because COSIP and COHSSIP have been innovative activities which require constant review. It requires support and cooperation from various agencies such as teachers, students, management and office staff of the institutions. There is a need for adequate human and physical resources for making the innovative activities a success. The whole theme is to be considered from the point of view of systematic approach. In this regard, the investigator has developed a paradigm 5.1 which explains the essential components which are needed to make such innovations a success. The paradigm is described briefly hereunder :

Paradigm

Higher education serves the national goals, political philosophy and helps in the development and modernisation process of the society. To cope with the emerging problems and for national development, the achievement in higher education is essential. The advancement in science and technology gives birth to quality improvement programmes which further, redefine the institutional roles and functions. The goals or purposes of institutions of higher education are based upon the local needs, community

PARADIGM 5·1 QUALITY IMPROVEMENT PROGRAMME IN HIGHER EDUCATION



expectations, students' aspirations and national objectives. For bringing about change in the conventional instructional process, innovative activities are to be introduced. The institutions adopt innovative activities relying upon their human and physical resources.

For making the innovative activities a success, the teachers have to be oriented with the concept, philosophy and actual process of the innovations. With this orientation, the teachers would be in a position to initiate a number of activities envisaged in the programmes. The teachers would become well-acquainted with the expected outcomes of the programmes.

Institutional autonomy is essentially the freedom to use resources and to define and execute programmes in consonance with institutional purposes. Autonomy should be provided to the teachers for admitting students; for initiating academic activities; for revising and modernising the syllabus and for adopting new techniques of evaluation of students' performance. It permits the development of individual initiative and creativity.

The innovative activities should be supported by the teachers and administration of the institution. The principals, teachers and students should have faith in innovative activities and should extend their cooperation for making them a success. The university administration should also support the institutions for planning and executing innovative activities. The innovative activities demand support from the community, and managing board of the institution.

Physical facilities should be augmented as per needs of the innovations. Teachers' work load and teacher-student should be taken care of while introducing innovative activities in the institutions of higher education.

After, fullfilling the requisite conditions stated above for adopting innovations, liberty is to be provided to the teachers to try out the innovative activities on a small group of students. The try out of innovative activities would enable the teachers to verify their feasibility and applicability according to the local needs and environmental conditions. It would enable the teachers to make necessary modifications and changes in the innovative activities so as to suit with the existing conditions.

The innovative activities have to become the part and parcel of the college schedule work. They should be integrated with the college regular work which would be helpful in seeking students' cooperation and faith in them.

The success of innovative activities has to be evaluated in terms of students' performance in academic activities. It would lead to the knowledge of the areas in which the innovative activities have succeeded or fallen short of expectations. It would provide feedback to both teachers and students in terms of attainment of specified objectives. On the basis of feedback, appropriate modifications have to be effected in teaching-learning and evaluation processes. This process would ultimately

lead the teachers to revise, update and modernise the syllabus. The next step, would be the institutionalisation of innovative activities. Institutionalisation does not mean that the activities have become static but within the framework they have to be made dynamic. The innovative activities require constant review and modification suggested which are possible through research work. The research endeavour would redefine and modify the goals or purposes of institutions of higher education and initiate quality improvement programmes which would be helpful in bringing advancement in higher education. In this way, the process of quality improvement programme in higher education will continue with the passage of time.

Suggestions for Further Research

A research investigation can never be exhaustive and final. It raises further, problems, queries and issues to be tacked. It is hoped that the present investigation will encourage, stimulate and even provoke further, researches in the area of quality improvement programme. A few suggestions for further studies to be undertaken in the area of quality improvement programme are outlined hereunder :

1. A follow-up study of COSIP and COHSSIP in selected colleges of India.
2. A comparative study of students' achievement of COSIP and COHSSIP colleges with non-COSIP and non-COHSSIP colleges.
3. A study of readiness of COSIP and COHSSIP colleges towards college autonomy.
4. To develop profiles of the institutions which implemented COSIP and COHSSIP successfully.

5. An in-depth study of factors affecting in the implementation of innovative activities.
6. A study of University Leadership Projects (U.L.P.) in COSIP and COHSSIP.
7. A study of professional development of college teachers through University Leadership Projects in COSIP and COHSSIP.
