APPENDIX IV

CENTRE FOR ADVANCED STUDY FOR EDUCATION
M. S. UNIVERSITY OF BARODA

Dear Teacher,

You are aware that in Gujarat state, the syllabus has been revised on the basis of NPE-86 and new textbooks introduced. As a teacher you must have reflected on the present science curriculum at the secondary level (standard viii, ix and x) on the aspects such as objectives, contents, resources, laboratory work and co-curricular activities in the teaching of science.

I am conducting a Ph.D. study entitled **'Science Curriculum and its Transaction in the Secondary Schools of Baroda: An Exploratory Study'** under the guidance of Dr. R. G. Kothari. In the light of your valued experience in teaching of science, I am approaching you to obtain information about the curriculum in vogue and transaction in classroom.

The enclosed questionnaire has been prepared to gather your opinion about the various aspects of the science curriculum such as objectives, contents, resources, laboratory work and co-curricular activities in the teaching of science at the secondary level. It would help my study immensely, if you would kindly mark your responses on the questionnaire. The data collected would be used for research work only and the responses will be kept confidential.

Your co-operation in this endeavor would be highly appreciated.

Thank you.

Yours sincerely,

P. S. Umasree

GENERAL INSTRUCTIONS

1. Please base your response on the classes you teach at the secondary level.
2. Please indicate your responses for Y/N items by placing a tic mark.
3. For items in the questionnaire where your opinion is sought in detail, kindly use the space provided below the questions.

QUESTIONNAIRE ON SCIENCE EDUCATION CURRICULUM AT SECONDARY LEVEL

SECTION 1 : TEACHER PROFILE

1. Name
2. Qualifications
3. School
4. Teaching experience
5. Classes taught
6. Any other subject taught
7. Number of classes taught
8. In-service training (last five years)

SECTION 2 : OBJECTIVES OF TEACHING SCIENCE

1. Are the objectives clearly stated? Y/N
2. Are the objectives feasible? Y/N
3. Are the objectives significant? Y/N
4. Do you find the objectives functional and helpful in selecting the learning experiences? Please specify.
5. What do you understand by the term scientific literacy?

SECTION 3 : TEXTBOOK CONTENT

Please give your opinion about the textbooks at the secondary level.

1. Is the content relevant to the curricular objectives? Y/N
2. Have you come across any factual errors in the textbook? Y/N
3. Is the content suitable for those who may not study science further? Please elaborate.
4. Is the content suitable for those who may study science further? Y/N
5. Does the written material actively involve the learner by citing the examples from daily life? Y/N
6. Does the content arouse the learners' curiosity to look up alternate sources of information? Y/N
7. Have the fundamental concepts been presented in a clear concise manner? Please elaborate.

8. Are you satisfied with the presentation of the material in the textbook? Please comment on:
9. Is the language used and comprehensible to the learner?
10. Are the unfamiliar terms/ new terms clarified or explained adequately? Please comment.
11. Are their sufficient illustrations to supplement the explanation in the text?
12. Are these illustrations helpful in clarifying the concepts?
    Y/N To some extent
13. Are the diagrams self-explanatory? Y/N/ To some extent
14. Are the captions on the diagrams clear? Comment.

SECTION 4 : TEACHING LEARNING ACTIVITIES AND RESOURCES

1. What is the number of periods allotted for science teaching per week for each grade?
2. Which of the following modes of teaching do you follow? Please tic mark.
   - Lecture method
   - Viewing listening
   - Problem solving
   - Laboratory and inquiry
   - Self learning
   - Any other

3. Is there a provision for a regular laboratory work for the students? Comment.
4. Do you think there is a scope for project work (individuals / groups)? Comment
5. If for the above item the answer is yes, list the topics for the projects.
6. If the answer is no, tick mark the constraints in organising the project work.
   - Lack of space
   - Lack of time
   - Lack of material
   - Lack of students' interest
   - Large syllabus
   - Any other

7. Does the school library have adequate number of books related to science?
   Y/N
8. How often do you use these for reference? Frequently/ Occasionally/Rarely
9. How often do the students use these? Frequently/ Occasionally/Rarely
10. Are there sufficient number of charts, models and diagrams in your school? Comment.
11. How often do you use these in classrooms? Frequently/ Occasionally/Rarely

12. What are the co-curricular activities related to science organised in your school :

    Science exhibitions
    Field trips
    Science weeks
    Science clubs
    Debates and seminar
    Any other

SECTION 5: OVERALL SCIENCE CURRICULUM (ASSESSMENT)

1. Which of the following intellectual processes of science are developed through the present science curriculum :

    Observation
    Classification
    Communication
    Hypothesising
    Interpreting data
    Questioning
    Any other

2. At the end of the secondary level in your opinion , does the present curriculum enable the student to:

    Develop understanding of the scientific principles, laws and theory. Y/N/To some extent
    Develop scientific temper in daily work. Y/N/To some extent
    Be conscious of problems regarding the environment. Y/N/to some extent
    Be aware of the uses and misuses of science Y/N/To some extent
    Be aware of the interface between science and society.Y/N/to some extent
    Improve social health and quality of life. Y/N/To some extent

3. Briefly mention the strengths and weaknesses of the present science curriculum.
4. Please state some specific suggestions for the improvement of the curriculum.