TEACHER QUESTIONNAIRE

SCIENCE

The answers to these questions should be recorded in section BB of the enclosed answer card. Do not answer these questions if you do not teach Science.

Indicate how many semesters of full-time training you have completed at a post-secondary school institution. (Note: a full academic year is here counted as equivalent to two semesters.)

1. In Physics:
   A. 0 Semesters   B. \( \leq 2 \)   C. \( > 2 \leq 4 \)
   D. \( > 4 \leq 6 \)  E. \( > 6 \)

2. In Chemistry:
   A. 0 Semesters   B. \( \leq 2 \)   C. \( > 2 \leq 4 \)
   D. \( > 4 \leq 6 \)  E. \( > 6 \)

3. In Biology (including Botany and Zoology):
   A. 0 Semesters   B. \( \leq 2 \)   C. \( > 2 \leq 4 \)
   D. \( > 4 \leq 6 \)  E. \( > 6 \)

4. In Geology:
   A. 0 Semesters   B. \( \leq 2 \)   C. \( > 2 \leq 4 \)
   D. \( > 4 \leq 6 \)  E. \( > 6 \)

5. In other Physical and Natural Sciences:
   A. 0 Semesters   B. \( \leq 2 \)   C. \( > 2 \leq 4 \)
   D. \( > 4 \leq 6 \)  E. \( > 6 \)

Indicate how many weeks (full-time equivalent) in-service teacher training you have received during the last 5 years. Please include also evening courses and other short in-service courses, counting 6 hours equal to one full-time day and 5 days equal to one full-time week.

6. In Physics:
   A. 0 weeks   B. \( > 0 \leq 2 \) weeks   C. \( > 2 \leq 4 \) weeks
   D. \( > 4 \leq 9 \) weeks  E. \( > 9 \) weeks

7. In Chemistry:
   A. 0 weeks   B. \( > 0 \leq 2 \) weeks   C. \( > 2 \leq 4 \) weeks
   D. \( > 4 \leq 9 \) weeks  E. \( > 9 \) weeks
Indicate how many weeks of full-time in-service training you have received during the last five years.

8. In Biology (including Botany and Zoology):
   A. 0 weeks  B. > 0 ≤ 2 weeks  C. > 2 ≤ 4 weeks
   D. > 4 ≤ 9 weeks  E. > 9 weeks

9. In Geology:
   A. 0 weeks  B. > 0 ≤ 2 weeks  C. > 2 ≤ 4 weeks
   D. > 4 ≤ 9 weeks  E. > 9 weeks

10. In other Physical or Natural Sciences:
    A. 0 weeks  B. > 0 ≤ 2 weeks  C. > 2 ≤ 4 weeks
    D. > 4 ≤ 9 weeks  E. > 9 weeks

11. Have you taken part in any science curriculum reform project for example, by using and reporting back on trial materials?
    A. Yes
    B. No

12. Do you feel that there are restrictions on your freedom to adapt the teaching syllabus to suit your particular style and the needs of your students? If so, where does the authority lie?
    A. I feel no restrictions
    B. authorities within the school
    C. authorities outside the school

13. Do you feel that limitations of laboratory facilities and equipment hamper your teaching?
    A. Yes, very seriously
    B. Yes, slightly
    C. No, not at all
14. **Indicate** to what extent you attempt to make the students' practical experience the basis of their scientific knowledge.

A. As much as possible, and I make a considerable effort to this end

B. I think it important, but other sources of information are equally important.

C. Only a small amount of the students' scientific knowledge can be based upon their practical experience.

15. To what extent do you think that science teaching should be concerned with developing the ability to think scientifically as well as giving a systematic knowledge of science.

A. I think the major emphasis should be upon developing the ability to think scientifically; the student will pick up the knowledge he needs in the process.

B. I think an equal balance should be held between scientific thinking and the acquisition of information.

C. At the school level, the acquisition of information is more important; the student will learn to think scientifically as a result of acquiring this information.

16. **Indicate** how often you give your Science students opportunities for planning and carrying out limited scientific investigations on their own.

A. Never

B. Seldom

C. Occasionally

D. Frequently

17. **Indicate** to what extent you consider it important for students as part of their Science training to take part in extra-curricular Science activities such as Science exhibitions, Science clubs, visits and field expeditions.

A. of great importance

B. of some importance

C. of little or no importance.
Indicate how many hours per week you spend, on the average, in the preparation of all your Science lessons, in marking students' Science work and in reading to keep up with your subject matter.

18. During school hours:
   A. \( \leq 3 \) hours   B. \( >3 \leq 6 \) hours   C. \( >6 \leq 10 \) hours
   D. \( >10 \leq 15 \) hours   E. \( >15 \) hours

19. Outside school hours
   A. \( \leq 5 \) hours   B. \( >5 \leq 10 \) hours   C. \( >10 \leq 15 \) hours
   D. \( >15 \leq 20 \) hours   E. \( >20 \) hours

20. Do you feel the need for refresher courses in Science?
   A. Yes
   B. No

If "yes" is this because you (see Q. 21 - 23)

21. now have teaching commitments which are outside of the area in which you were initially trained?
   A. Yes
   B. No

22. feel the need to keep up with major new developments in Science itself.
   A. Yes
   B. No

23. feel the need to keep up with major new developments in Science teaching methods.
   A. Yes
   B. No

24. Indicate if you have all the opportunities you need for refresher (in-service) training in Science.
   A. Yes
   B. No