

learning as measured by various achievement tests as opposed to achievement that includes an evaluation of the consistency and quality of classwork as in a course grade. The latter seems to be more strongly correlated to attitude.

### Appendix: Attitude toward Science in School Assessment

Please use this scale to answer the following questions:

- SA — Strongly agree  
 A — Agree  
 N — Neither agree nor disagree  
 D — Disagree  
 SD — Strongly disagree

(Circle one choice.)

- |      |    |   |   |   |    |  |
|------|----|---|---|---|----|--|
| (1)  | SA | A | N | D | SD | Science is fun.  |
| (2)  | SA | A | N | D | SD | I do not like science and it bothers me to have to study it.             |
| (3)  | SA | A | N | D | SD | During science class, I usually am interested.                           |
| (4)  | SA | A | N | D | SD | I would like to learn more about science.                                |
| (5)  | SA | A | N | D | SD | If I knew I would never go to science class again, I would feel sad.     |
| (6)  | SA | A | N | D | SD | Science is interesting to me and I enjoy it.                             |
| (7)  | SA | A | N | D | SD | Science makes me feel uncomfortable, restless, irritable, and impatient. |
| (8)  | SA | A | N | D | SD | Science is fascinating and fun.  |
| (9)  | SA | A | N | D | SD | The feeling that I have towards science is a good feeling.               |
| (10) | SA | A | N | D | SD | When I hear the word science, I have a feeling of dislike.               |
| (11) | SA | A | N | D | SD | Science is a topic which I enjoy studying.                               |
| (12) | SA | A | N | D | SD | I feel at ease with science and I like it very much.                     |
| (13) | SA | A | N | D | SD | I feel a definite positive reaction to science.                          |
| (14) | SA | A | N | D | SD | Science is boring.   |

### References

- Baker, Dale R. (1985). Predictive value of attitude, cognitive ability, and personality to science achievement in the middle school. *Journal of research in science teaching*, 22(2), 103–113.
- Blosser, Patricia E. (1984). Attitude research in science education. ERIC Clearinghouse of Science, Mathematics and Environmental Education Information Bulletin, No. 1, Ohio State University, Columbus, OH.