

**AMENDMENT TO THE AMENDMENT IN THE  
NATURE OF A SUBSTITUTE TO H.R. 3036  
OFFERED BY MR. SARBANES OF MARYLAND**

Page 1, after line 5, insert the following (and redesignate provisions accordingly):

1       (a) DEFINITIONS.—Section 3 of the National Envi-  
2 ronmental Education Act (20 U.S.C. 5502) is amended—

3           (1) in paragraph (12), by striking “and” at the  
4 end;

5           (2) in paragraph (13), by striking the period at  
6 the end and inserting a semicolon; and

7           (3) by adding at the end the following:

8           “(14) ‘principles of scientific research’ means  
9 principles of research that—

10                   “(A) apply rigorous, systematic, and objec-  
11 tive methodology to obtain reliable and valid  
12 knowledge relevant to education activities and  
13 programs;

14                   “(B) present findings and make claims  
15 that are appropriate to, and supported by, the  
16 methods that have been employed; and

17                   “(C) include, appropriate to the research  
18 being conducted—

1           “(i) use of systematic, empirical meth-  
2           ods that draw on observation or experi-  
3           ment;

4           “(ii) use of data analyses that are  
5           adequate to support the general findings;

6           “(iii) reliance on measurements or ob-  
7           servational methods that provide reliable  
8           and generalizable findings;

9           “(iv) strong claims of causal relation-  
10          ships, only with research designs that  
11          eliminate plausible completing explanations  
12          for observed results, such as, but not lim-  
13          ited to, random-assignment experiments;

14          “(v) presentation of studies and meth-  
15          ods in sufficient detail and clarity to allow  
16          for replication or, at a minimum, to offer  
17          the opportunity to build systematically on  
18          the findings of the research;

19          “(vi) acceptance by a peer-reviewed  
20          journal or critique by a panel of inde-  
21          pendent experts through a comparably rig-  
22          orous, objective, and scientific review; and

23          “(vii) consistency of findings across  
24          multiple studies or sites to support the  
25          generality of results and conclusions.

1           “(15) ‘scientifically valid research’ includes ap-  
2           plied research, basic research, and field-initiated re-  
3           search in which the rationale, design, and interpreta-  
4           tion are soundly developed in accordance with prin-  
5           ciples of scientific research.

6           “(16) ‘State’ has the meaning given such term  
7           in section 9101 of the Elementary and Secondary  
8           Education Act of 1965; and

9           “(17) ‘State educational agency’ has the mean-  
10          ing given such term in section 9101 of the Elemen-  
11          tary and Secondary Education Act of 1965.”.

