

Dale Bayard, Committee Chair

See p. 3 red box and pp. 93-101.



**BOARD
of
ELEMENTARY
and
SECONDARY
EDUCATION**

STUDENT/SCHOOL PERFORMANCE and SUPPORT COMMITTEE

Claiborne Building
Room 1-100, The Louisiana Purchase Room
1201 N. 3rd Street, Baton Rouge, LA 70802

Tuesday, December 2, 2008, 9:00 a.m.

(NOTICE: This meeting may be convened up to 30 minutes prior to the posted schedule to facilitate the orderly conduct of business.)

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The LA Dept. of Education's proposed policy for BESE's administration of Act 473, the LA Science Education Act, was to be considered at this Dec. 2, 2008, meeting of the Student/School Performance and Support Committee (S/SPS), but the item was deferred until January 2009. See p. 3 of this agenda. For the LA Dept. of Education's recommendation to BESE, which was scheduled for the 12.2.08 meeting, see p. 89 following this page. For the LDoE's proposed policy, see pp. 93-94. For the LA Science Education Act Advisory Committee's guidelines, see "Attachment 2," pp. 95-100, following this agenda. For names of the LSEA Advisory Committee members, see p. 101.

LOUISIANA BOARD OF ELEMENTARY AND SECONDARY EDUCATION

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Tuesday, December 2, 2008
9:00 a.m.

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Committee Members

Chair, Mr. Dale Bayard
Vice-Chair, Mr. John Bennett
Member, Mr. Chas Roemer

SDE Liaisons

Ms. Donna Nola-Ganey
Dr. Scott Norton

BESE Staff

Ms. Janie Johnson
Ms. Nina Ford

AGENDA

NOTICE: The Louisiana State Board of Elementary and Secondary Education or its committees reserve the right to enter into Executive Session, if needed, in accordance with R.S. 42:6.1.

In accordance with the American with Disabilities Act, if you need special assistance at a public meeting of the Board of Elementary and Secondary Education, please contact the Executive Director of BESE at 225-342-5840, or by email at stese@la.gov, describing the assistance that is necessary.

- I. Call to Order
- II. Roll Call
- III. **CONSENT AGENDA (including other items indicated by * on the agenda)**
 - A. Informational Reports
 1. Consideration of a report on elementary and/or secondary elective courses, including nonpublic electives. (Reports on public school electives are presented in August and January. Reports on nonpublic electives are presented in October.)

None
 2. Consideration of a semiannual report on approved alternative schools/programs. (reports due in December and June)
 3. Consideration of an update report on LEAP, GEE, and iLEAP testing. (reports due in October, February, and May)

None

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4. Consideration of a quarterly report on School Choice Plans. (reports due in August, October, January, and April)

None

B. Administrative Actions

P. 2

1. Consideration of requests from local education agencies for waivers of Bulletin 741, *Louisiana Handbook for School Administrators*, school approval standards, for regular and special education, submitted by the State Superintendent of Education. (monthly)

2. Consideration of Textbook Waiver Requests. (monthly)

None

IV. **STANDING ITEMS**

A. Issues regarding content standards, including Grade Level Expectations, Textbooks, and Curriculum.

P. 5

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1. Consideration of approval of updated textbook copyrights.

B. Accountability issues

P. 7

1. Consideration of increasing the membership of the School and District Accountability Commission.

P. 8

2. Consideration of a report on the activities of the School and District Accountability Commission.

C. Assessment issues

P. 13

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1. Consideration of a discussion on LEAP relative to students with disabilities.

D. Special Education and Section 504 issues

P. 14

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1. Consideration of changes to Bulletin 1530: *Louisiana IEP Handbook for Students with Disabilities*.

P. 49

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2. Consideration of revisions to Bulletin 1706, Subpart B, *The Regulations for the Gifted and Talented Students*. (referred to PSAC in October 2008)

P. 51

3. Consideration of revisions to Bulletin 1508, *Pupil Appraisal Handbook*. (referred to PSAC and SEAC in October 2008)

AGENDA

P. 83 * 4. Consideration of Annual Performance Report required under Part B of IDEA.

E. Preschool and Early Childhood issues

P. 85 1. Consideration of a draft resolution concerning Headstart programs for children ages 0-3 years old and the funding mechanism for the inclusion of those children.

F. Adult Education issues

None

G. School and Community Support issues

P. 87

1. Consideration of a draft resolution concerning the policy to be added to Bulletin 741 for administering Act 473, the LA Science Education Act.

H. Alternative

None

Item A1 encompasses consideration of Act 473, the LA Science Education Act, concerning the policy to be added to Bulletin 741 for administering Act 473, the LA Science Education Act. However, on Dec. 2, 2008, the item was deferred until the January 2009 meeting. The S/SPS Committee met on January 13, 2009, and the agenda item for 1/13/09 is listed under "Referrals: Unfinished Business," as on this Dec. 2008 agenda. BESE met in full on January 15.

V. REFERRALS

A. Unfinished Business

P. 89

1. Consideration of revisions to Bulletin 741, *Louisiana Handbook for School Administrators*, based on Acts of the Louisiana 2008 Regular Legislative Session. (referred to PSAC in October 2008)

P. 102

2. Consideration of a report to the Board on developing Board Policy recommendations for establishing: (report due in December 2008)

a. Standards for effective, high-quality after-school/extended learning programs inclusive of both academic and enrichment activities, and

b. Methods for evaluating programmatic effectiveness, including the measurement of student academic achievement.

B. New Business

P. 120

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1. Consideration of revisions to Bulletin 741, *Louisiana Handbook for School Administrators*, addressing the passage of SB 548, Act 466 of the 2008 Legislative Session.

VI. PUBLIC COMMENTS REGARDING NOTICES OF INTENT (submitted in accordance with La. R.S. 49:953).

None

AGENDA

<input type="checkbox"/> Receive & Refer <input checked="" type="checkbox"/> Action <input type="checkbox"/> Information	Contact Person: <u>Nancy Beben</u> Phone Number: <u>219-0805</u> Office: <u>Student and School Performance</u>
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Student/School Performance and Support Committee AGENDA

Item # V. A. 1 Title: Consideration of revisions to Bulletin 741: *Louisiana Handbook for School Administrators* based on acts of the 2008 Louisiana legislative session.

RECOMMENDATION: Approve the department's recommendation.

Summary of recommendation or proposed changes:

The department recommends approval of the changes to *Bulletin 741: Louisiana Handbook for School Administrators* in Attachment 1 which are based on the following acts from the 2008 Louisiana Legislature:

- §303 B – Required by Act 380
- §501 – Required by Act 649
- §723 B – Required by Act 361
- §1309 B – Required by Act 145
- §1110 – Required by Act 507
- §1103 I – Required by Act 142
- §337 C – Required by Acts 907 and 473
- §502 C – Required by Act 359
- §2304 – Required by Act 473

Attachment 2 is the "Louisiana Science Education Act: Guidelines for Science Teaching," which begins on p. 95 following this page.

Attachment 2 contains the guidance for teachers referenced in §2304 A. 1. The department will inform LEAs that the guidance is available and will provide it to districts upon request. The guidance was developed by a committee of science experts listed in Attachment 3.

Implications of proposed recommendation -- benefits and problematic areas:

None

<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Administrative Code
<input type="checkbox"/> Emergency Adoption -- Reason:	<input type="checkbox"/> Code Reference:
<input checked="" type="checkbox"/> Bulletin Item -- Bulletin: 741	<input type="checkbox"/> Authority Note:

Nancy Beben
 Division Director

William V. Norton III
 Assistant Superintendent

Ollie S. Taylor /pw
 Deputy Superintendent

[Signature]
 State Superintendent

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:221; R.S. 17:226; R.S. 17:233.
HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 31:1273 (June 2005), amended LR 32:546 (April 2006), LR 32:1030 (June 2006), LR 33:2351 (November 2007).

§337. Written Policies and Procedures

A. – B. ...

C. Each LEA shall have policies and procedures that address, but are not limited to, the following:

1. – 16. ...

17. the notification of the parent or legal guardian of every student, in writing, of the proper process and procedures to follow in order to make a complaint or request information from the school or the school's governing authority.

a. Such information shall include, at a minimum, the name, address, phone number, and email address of the appropriate person to contact at each step of the prescribed process or procedure, and shall be updated, at least, on an annual basis.

b. Such information shall be incorporated into any existing policy or policies, code of conduct, or student handbook of the LEA or of each school under its jurisdiction.

18. the implementation of §2304 Science Education.

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:6; R.S. 17:81; R.S. 17:172; R.S.17:240; R.S. 17:285.1.

§502. Staff Misconduct

A. – B. ...

C. Interaction between a student and a school employee in any classroom, office, meeting room, or other similarly enclosed area on school property is prohibited unless, during the full time of such interaction, another school employee, the student's parent, or other authorized adult is present, or the student and the employee are clearly viewable by persons outside the area through an open door or entrance or window or other means that provide provides an unobstructed view. The following exceptions apply:

1. Interaction between a student and a guidance counselor as defined in R.S. 17:3002, or between a student and a social worker, a psychologist or other duly certified/licensed mental health or counseling professional.
2. Interaction between a student and a school employee when the school employee is appraising, evaluating, or testing the student in accordance with the provisions of BESE Bulletin 1508.
3. Interaction between a student and a school employee when the employee is providing services as required by the student's IEP.
4. Interaction between a student and a school employee engaged in the performance of a noncomplex health procedure as defined in R.S. 17:436(A).
5. Interaction between a student and a school nurse or other duly certified/licensed health care professional.
6. Interaction between a student and a teacher or administrator concerning a matter of confidentiality and/or safety.

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:15; R.S. 17:587.1; R.S. 17:7.

HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 31:1265 (June 2005), amended LR 33:431 (March 2006)

This begins the proposed revision to Bulletin 741, *Louisiana Handbook for School Administrators*.

§2304. Science Education

This is the proposed version of §2304 of Bulletin 741 that was to be considered at the Dec. 2, 2008, S/SPS Committee meeting.

A. BESE shall, upon request of an LEA, allow and assist teachers and school administrators to create and foster an environment that promotes critical thinking skills, logical analysis, and open and objective discussion of concepts, laws, principles, and scientific theories.

1. Such assistance shall include support and guidance for teachers regarding effective ways to understand, analyze, critique, and objectively review concepts, laws, principles, and scientific theories.

2. Any LEA may request such assistance by contacting the Division of Curriculum Standards of the DOE.

B. Teachers shall teach the content presented in the Louisiana Comprehensive Curriculum or other curriculum developed by the LEA that is based on the Louisiana Science Content Standards and Grade-Level Expectations, and the standard textbook supplied by the LEA.

1. The teacher may then use supplemental textbooks and other instructional materials as permitted by the LEA unless otherwise prohibited by BESE.

C. Classroom instruction and materials shall not promote any religious doctrine, promote discrimination for or against a particular set of religious beliefs, or promote discrimination for or against religion or nonreligion. Religious beliefs shall not be advanced under the guise of encouraging critical thinking.

D. BESE shall determine which supplemental materials shall be prohibited from use in science classes in public schools according the procedure below.

1. Any citizen may submit materials used by an LEA to the Division of Curriculum Standards of the DOE for consideration by BESE.

2. The DOE will make a recommendation to BESE based on the following criteria.

a. The supplemental materials must be grade-level appropriate.

b. The information contained in the supplemental materials must be scientifically sound and supported by empirical evidence.

c. The materials shall not promote any religious doctrine, promote discrimination for or against a particular set of religious beliefs, or promote discrimination for or against religion or nonreligion.

d. Materials that teach creationism or intelligent design or that advance the religious belief that a supernatural being created humankind shall be prohibited for use in science classes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:285.1.

This is the policy that was proposed by the LA Dept. of Education on Dec. 2 for insertion into Bulletin 741, the *Louisiana Handbook for School Administrators*. Bulletin 741 is available at <http://www.doa.louisiana.gov/osr/lac/28v115/28v115.doc> on web page <http://www.doe.state.la.us/ide/bese/1041.html>.

The guidelines that follow on the next page are intended to serve as a reference document for implementation of the policy in its final form. The above version of the policy was deferred by the Student/School Performance Support Committee on December 2, 2008. That committee is a subset of BESE members: Dale Bayard, chair; John Bennett, vice chair; and Chas Roemer. A revised version was later drawn up for proposal on January 13, 2009. According to Rev. Gene Mills, executive director of the Religious Right group the LA Family Forum, the revised policy was the produce of negotiations between the Louisiana Family Forum, LA. Dept. of Education Staff, legislative sponsors of the bill, and BESE members. (See Will Sentell, "Science lessons to stir debate," *Baton Rouge Advocate*, January 9, 2009, at <http://www.2theadvocate.com/news/37319874.html?showAll=y&c=y>.)

The revised policy was discussed at the Student/School Performance Support Committee meeting in Baton Rouge, LA, on January 13, 2009. See the S/SPS January 13, 2009, Meeting Packet for that version of the policy.

Louisiana Science Education Act Guidelines for Science Teaching

Introduction

According to the *Louisiana Comprehensive Curriculum: Science*, "Science is the human activity of seeking natural explanations for what we observe in the world around us. Science does so through the use of observations, experimentation, inferences, and logical arguments while maintaining strict empirical standards and healthy skepticism. While assuming that anything that can be observed or measured is amenable to scientific investigation, science also explicates that the universe operates according to regularities that can be discovered and understood through scientific investigations. The testing of various explanations of natural phenomena for their consistency with empirical data is an essential part of the methodology of science. Scientific explanations must be consistent with experimental and observational data and be tested by scientists through additional observations and/or experimentation. Established theories stand until new facts are discovered, tested, and verified or a new hypothesis, which more closely explains the data, is developed and tested. Explanations that are not consistent with empirical evidence or cannot be tested empirically are not a part of science (ix)."

As students prepare to be effective citizens in a global market, schools must provide opportunities for students to use 21st century skills. Teachers must select activities that allow students to think critically about the world around them. Science education is an active discipline that involves questioning, reasoning, experimenting, analyzing and interpreting data, and solving problems. The science classroom needs to be designed to encourage these types of activities.

What Is Science?

- Science is a discipline that is based on empirical evidence.
- Science is useful for solving problems and collecting evidence.
- Science includes observation, experimentation, collection of a multitude of information, and replication.
- Science is active and involves asking questions and thinking critically to try to solve those questions.
- Science involves peer review and publication.

What is NOT science?

- Science is not static.
- Science is not concerned with belief systems.
- Science is not concerned with solving moral questions.

The following middle school and high school guidelines describe what science should look like in the classroom setting.

Middle School Science Guidelines

Science instruction at the middle school level should:

- Provide an experience of inquiry as an instructional outcome (knowing and doing)
- Implement approaches to teaching science (e.g., modeling and experimental design) that cause students to question and explore and to use experiences to raise and answer questions
- Offer opportunities to conduct investigations that collect evidence needed to answer a variety of questions
- Support learning that involves critical thinking and requires logical explanations based on evidence
- Introduce activities (e.g., using real time data, addressing a community issue, etc.) that support discovery and call for student exploration, explanation, and decision-making
- Guide student awareness that the scientific community seeks explanations that are based on empirical evidence and are logically consistent
- Assist students in understanding the importance of being skeptical as they review their work and the work of others
- Focus on the use of critical thinking skills when students examine issues in science
- Avoid instructor or media bias
- Promote research that draws from published and scientifically credentialed sources (i.e., AAAS, NAS, CDC, NASA, NOAA, *Science*, *Nature*)
- Not advocate any religious interpretations of nature and should be non-judgmental

High School Science Guidelines

Science instruction at the high school level should:

- Emphasize teaching students how to think through issues, analyze available information, and solve problems. Model these skills.
- Differentiate among hypothesis, scientific theory, and scientific law. (See attached glossary.)
- Use empirical evidence, verifiability, reliability, logical consistency, verified predictions, and peer review to differentiate between science and non-science.
- Utilize literacy strategies such as student opinionnaires, graphic organizers, and SPAWN to promote critical thinking on alternative explanations.
(Literacy strategies can be accessed at <http://www.louisianaschools.net/1de/uploads/11056.doc>.)
- Utilize SI GLE 16, Rules of Evidence when examining the scientific validity of claims or theories.
[SI GLE 16. Use the following rules of evidence to examine experimental results:
(a) Can an expert's technique or theory be tested, has it been tested, or is it simply a subjective, conclusive approach that cannot be reasonably assessed for reliability?
(b) Has the technique or theory been subjected to peer review and publication?
(c) What is the known or potential rate of error of the technique or theory when applied?
(d) Were standards and controls applied and maintained?
(e) Has the technique or theory been generally accepted in the scientific community?]
- Utilize the seven questions from the *Exploratorium: The Museum of Science, Art, and Human Perception* for evidence examination, logical analysis and open discussion of any scientific claim.
 - What is the claim?
 - Who makes it?
 - What is the evidence?
 - How did the investigator get the evidence?
 - Is there anything (or anyone) to back up this claim?
 - Could there be another explanation?
 - Who cares?
 - Can you believe it?
- Guide students in researching opposing ideas, explanations, or theories and in analyzing sources of information.
- Provide instruction to students on how to objectively communicate their ideas, how to question other students, and how to defend their position using supportive evidence.
- Guide students to distinguish between science and religion.
(Faith refers to beliefs that are accepted without empirical [observed] evidence. Most religions have tenets of faith. Science differs from religion because it is the nature of science to test and retest explanations about the natural world and to record empirical evidence. Scientific explanations are likely to be supported by and built on and modified with new evidence and new ways of looking at old information. This is quite different from most religious beliefs.)

Glossary

Empirical Evidence

A central concept in science is that all evidence must be empirical, that is, dependent on evidence or consequences that are observable by the senses. Empirical evidence is data that are produced by experimental testing or observation. "Empirical" as an adjective or adverb is used in conjunction with both the natural and social sciences, and refers to the use of working hypotheses that are testable using observation or experiments. In practice, the accumulation of evidence for or against any particular theory involves planned research designs for the collection of empirical data.

Hypothesis

A hypothesis is a preliminary assumption, prediction, or tentative explanation based on observation, research, or information. It is a statement that may account for a set of facts or an observed phenomenon. It is stated for the purpose of investigation and testing. Following experimentation, observation, or research, a hypothesis may or may not be supported by the evidence, but in science there is no such thing as absolute proof. Evidence supports the hypothesis; it does not prove the hypothesis.

Theories in Science

The most important scientific explanations are called theories. In ordinary speech, theory is often used to mean "guess" or "hunch;" whereas, in scientific terminology, a theory is a set of universal statements that explains some aspect of the natural world. Theories are powerful tools and are based on long term repeated testing and evidence. Scientific theory is the terminology used instead of law when the explanation cannot be universally tested such as formation of the universe or changes that occurred over long periods of time. Theories often require abstract rather than concrete reasoning. Scientists seek to develop theories that:

- are firmly grounded in and based upon empirical evidence;
- are logically consistent with other well-established principles;
- explain more than rival theories; and
- have the potential to lead to new knowledge.

The body of scientific knowledge changes as new observations and discoveries are made. In addition, theories and other explanations change. New theories emerge, and other theories are modified or discarded. Throughout this process, theories are formulated and tested on the basis of empirical evidence, internal consistency, and their explanatory power. Often scientific theories have more empirical evidence to support them than do scientific laws.

Scientific Law

A scientific law is a law-like statement that generalizes across a set of conditions. To be accorded law-like status, a wide variety of these conditions should be known (i.e., the law has a well documented history of successful replication and is supported by empirical evidence). While the concept of a scientific law is closely related to the concept of a scientific theory, it is important to realize that a scientific law does not grow from or supersede a related scientific theory. **A scientific law attempts to describe an observation in nature while a scientific theory attempts to explain it.**

Laws (e.g., Boyle's law and Newton's laws of motion) form the basic theoretical structure of the physical sciences, so the rejection of a law by the scientific community is an extremely rare event. On occasion, a law may be modified, as was the case when Albert Einstein showed that Newton's laws of motion do not apply to objects traveling at speeds close to that of light.

Reliability

In experimental sciences, reliability is the extent to which the measurements of a test remain consistent over repeated tests of the same subject under identical conditions. An experiment is reliable if it yields consistent results of the same measure. It is unreliable if repeated measurements give different results.

Verifiability

A synonym for verifiability would be confirmability. A scientist requires the specification of observations that would count for or against a statement, which would confirm or disconfirm it to a certain extent. Scientists use data and empirical evidence to support statements. The criterion of verifiability is one of the ideal goals of scientific theory building. Scientific knowledge is built upon empirically verifiable statements.

Sources:

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Louisiana Science Education Act Advisory Committee

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High School Biology Teacher
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Ms. Alison Ocmand
Louisiana Federation of Teachers

Invited but unable to attend:

Dr. Gary Stringer, Professor of Geosciences
Department Head, Curriculum & Instruction
University of Louisiana – Monroe

Dr. Scott Vetter, Chairman
Geology Department
Centenary College of Louisiana

Mr. Steve Monahan
Louisiana Federation of Teacher