

Louisiana Believes

Science Standards Review Process
2016-2017



The background features a light blue gradient with horizontal lines. There are large, irregular watercolor-style splashes in various shades of blue, primarily on the left and right sides, framing the central area.

Background

History & Current Status

Historical Timeline

- 1997: Louisiana adopts science standards
- 2005: Louisiana writes GLEs based on the 1997 standards

Louisiana lags behind

- Only two states currently use standards older than Louisiana (New Mexico, Wisconsin)
- Louisiana ranks 45th on the 2011 NAEP science assessment
- BESE Bulletin 741, §2301 states, “The Louisiana content standards shall be subject to review and revision to maintain rigor and high expectations for teaching and learning. Such review of each content area shall occur at least once every seven years”
- According to the [Brookings Institute](#), 20% of all jobs require STEM knowledge, Louisiana science GLEs lack math, technology and engineering integration

Louisiana Standards

Louisiana must build science standards strong in content that prepare students for their future, whether that be post-secondary education in a STEM field, a position in the industrial workforce, or as citizens who influence agricultural, petroleum, and environmental decisions.

Louisiana is free to use the standards that best prepare students and meet state laws. Louisiana's state laws require that standards be rigorous and prepare students for college and the workplace, as determined by educators, experts, and business and industry leaders.

The following principles will guide this local review:

- 1. Consistency:** The standards review will be consistent with the legally required process and with past Louisiana standards reviews.
- 2. Focus on the standards:** The review process will focus on the substance of the actual standards themselves.
- 3. Public input:** The review process will include opportunities for the public to weigh in on every standard. In addition, all committee meetings will be open to the public.

Committee Membership

Standards Committees & Participation

Standards Committee

40 members who guide process and propose standards to BESE

Science Standards Committee

Review and Feedback Workgroups

Louisiana educators who review drafts virtually and provide feedback

Review and Feedback Workgroups

K-8

High School

Content Workgroups

62 Louisiana educators who draft the standards, review feedback, and propose standards to the Standards Committee

35 members including: educators from every grade level (K-8), special education educators, STEM educators

27 members including: educators of biology, chemistry, earth and space science, environmental science, physical science, physics, STEM, special education

Standards Committee

Louisiana academic content standards should be a living set of nationally recognized expectations designed to meet the ever-changing needs of our students, in order to ensure their success in postsecondary education and in the workplace. BESE policy provides for a regular review of standards to ensure that they meet these goals.

A 40-member Standards Committee will oversee the 2016-2017 review of science standards. This committee will oversee and coordinate the review process pursuant to BESE, monitor progress, ensure alignment across grade levels and subjects, and make final recommendations to BESE.

Given the technical nature of the work required to review content standards, at least half of the committee will be Louisiana, district and school-based educators. Given their expertise, many of these members will also serve on one of three content subcommittees.

The remaining members of the committee will be nominees from Louisiana organizations.

Standards Committee

1 K-2 Committee	20 University
2 K-2 Committee	21 University (EPSCOR)
3 K-2 Committee	22 LA Science Teachers Association (LSTA)
4 3-5 Committee	23 LA Association of Science Leaders (LASL)
5 3-5 Committee	24 Louisiana Early Childhood Assoc. (LAECA)
6 3-5 Committee	25 Board of Regents (BOR)
7 6-8 Committee	26 Louisiana Parent Teacher Assoc. (PTA)
8 6-8 Committee	27 Black Alliance for Educational Options (BAEO)
9 6-8 Committee	28 Urban League
10 HS Committee	29 LA Association of Principals (LAP)
11 HS Committee	30 LA Association of School Supts (LASS)
12 HS Committee (STEM)	31 LA School Board Association (LSBA)
13 Louisiana Association of Educators	32 LA Assoc. of Public Charter Schools (LAPCS)
14 Louisiana Federation of Teachers (LFT)	33 LA Assoc. of Business and Industry (LABI)
15 Associated Professional Educators of LA (A+PEL)	34 LSU Agricultural Center
16 The Louisiana Council of Engineering Deans	35 Louisiana Stand for Children
17 Louisiana Engineering Society	36 Louisiana Family Forum
18 Louisiana Association of Teachers of Mathematics	37 4 BESE At-Large Members
19 Louisiana Academy of Sciences	

2016-2017 Content Workgroups

Two content workgroups will review, develop, and propose a set of standards to the Standards Committee. Each workgroup will work in teams focused on a specific grade levels.

- **K-8 Content Workgroup**
- **High School Workgroup**
 - Physical Science & Physics
 - Biology
 - Chemistry
 - Earth Science & Environmental Science
 - STEM

At least seventy five percent of each content workgroup will be district and school-based educators.

K-8 Workgroup

1	Kindergarten educator	13	5 th grade educator	25	K-8 science specialist
2	Kindergarten educator	14	3-5 educator	26	LSTA member
3	1 st grade educator	15	6 th grade educator	27	University*
4	1 st grade educator	16	6 th grade educator	28	LA Early Childhood Assoc.
5	2 nd grade educator	17	7 th grade educator	29	Elementary special education
6	2 nd grade educator	18	7 th grade educator	30	Middle school special education
7	K-2 educator	19	8 th grade educator	31	LATM member
8	3 rd grade educator	20	8 th grade educator	32	Technology educator
9	3 rd grade educator	21	Elementary Educator	33	K-8 STEM educator
10	4 th grade educator	22	Elementary Educator	34	K-8 STEM educator
11	4 th grade educator	23	Middle School Educator	35	High school science educator
12	5 th grade educator	24	Middle School Educator		
*Must be a science education instructor					

High School Workgroup

1 Biology educator	14 Physical science educator
2 Biology educator	15 Physical science educator
3 Biology educator	16 Physics educator
4 Biology educator	17 Physics educator
5 Chemistry educator	18 STEM educator
6 Chemistry educator	19 STEM educator
7 Chemistry educator	20 STEM educator
8 Chemistry educator	21 STEM educator
9 Earth science educator	22 General science educator
10 Earth science educator	23 LASL member
11 Environmental science educator	24 High school special education
12 Environmental science educator	25 Technology educator
13 Astronomy or space science educator	26 Representative from Laser Interferometer Gravitational-Wave Observatory (LIGO)
14 University*	27 Representative from Cyber Innovation Center
*Must be a science education instructor	

Selection Process

Nominations will be taken from LEAs (districts and charter schools) and approved organizations for the Standards Committee and Content Workgroups. An open application will be released for the review and feedback workgroups.

This process will:

- Ensure all LEAs have the opportunity to be represented
- Ensure the workgroups are diverse in terms of geography, gender, and race/ethnicity
- Ensure all Louisiana science educators have the opportunity to apply to be a part of the Review and Feedback Workgroups
- Allow over 100 educators, scientists, and other professionals from across the state to review and provide feedback on the standards prior to them being posted for public review



Review Process and Meeting Procedures

Review Process: Overview Timeline

Date	Action
June-July	<ul style="list-style-type: none">• Solicit nominations from districts, charter schools, and approved organizations• Release applications for draft reviewers• Finalize selection of members
August - September	<ul style="list-style-type: none">• Present committee and workgroup members to BESE• Committee and workgroup meetings to review and revise standards
October - November	<ul style="list-style-type: none">• Draft reviewers provide feedback• Workgroups meet to revise
December - January	<ul style="list-style-type: none">• Public comment portal• Expert reviews
February	<ul style="list-style-type: none">• Revisions and committee vote
March	<ul style="list-style-type: none">• Submit proposal to BESE
June	<ul style="list-style-type: none">• Teacher Leader Advisors develop transitional tools

Review Process: Detailed Timeline

Step	Date	Location
Committee and Workgroup Selections	June-July, 2016	NA
Standards Committee and Content Workgroups Meetings	August 17-18, 2016	Baton Rouge
Content Workgroup Meetings <i>Produce first draft</i>	September 12-13, 2016 October 5-6, 2016 (if needed)	Alexandria New Orleans
Review and Feedback Workgroup Meetings	October 14-24, 2016	Independent reviews
Content Workgroup Meetings <i>Produce draft for public comment</i>	November 7, 2016	Covington
Public Comment Portal	December 1, 2016 – January 6, 2017	Independent reviews
Content Workgroups <i>Review feedback and revise</i>	January 12-13, 2017	Lafayette
Standards Committee <i>Review proposal and feedback</i>	January 25, 2017	Bossier
Content Workgroups <i>Update if needed</i>	February 1, 2017	Meet only as needed in Baton Rouge
Standards Committee <i>Final draft and vote</i>	February 13, 2017	New Orleans

Review Process: Public Comment

Step	Details
Public Comment	<ul style="list-style-type: none">• Standards posted on the website for public comment• Parents, committee members, educators, and other citizens share their feedback on each individual standard, K-12• Content workgroups review feedback from the public and determine appropriate revisions to the proposed standards
<i>December 1, 2016- January 6, 2017</i>	

Meeting Procedures

- **Committee meetings:** Meetings of the Standards Committee will be advertised, open to the public, and held pursuant to the Louisiana Open Meetings Law.
- **Public comment at meetings:** Public comment will be received during each committee meeting and prior to any votes. Members of the public may also submit written comments for the record.
- **Content of public comment:** All public comment must relate to the review and development of standards, not other matters of policy.
- **Committee leadership:** Each committee and workgroup will be facilitated by a chairman.
- **Workgroups:** Workgroups will divide into smaller subgroups as needed to address grade level and content specific work.
- **Voting:** Content workgroup members will work together to finalize any recommended revisions or additions to standards. Votes will then be taken as a slate, not by individual standard or edit, to move proposed standards forward to the committee and to BESE.
- **Voting proxies:** No proxies will be allowed for voting purposes. Participants must be in attendance to vote.