

# Louisiana Believes

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Science Standards Review Process  
2016-2017



The background features a light blue and white watercolor-style splash pattern. Overlaid on this are thin, horizontal, light blue lines that span the width of the image, creating a lined paper effect.

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 45<sup>th</sup> 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

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

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

\*Must be a science education instructor

# High School Workgroup

<b>1</b> Biology educator	<b>14</b> Physical science educator
<b>2</b> Biology educator	<b>15</b> Physical science educator
<b>3</b> Biology educator	<b>16</b> Physics educator
<b>4</b> Biology educator	<b>17</b> Physics educator
<b>5</b> Chemistry educator	<b>18</b> STEM educator
<b>6</b> Chemistry educator	<b>19</b> STEM educator
<b>7</b> Chemistry educator	<b>20</b> STEM educator
<b>8</b> Chemistry educator	<b>21</b> STEM educator
<b>9</b> Earth science educator	<b>22</b> General science educator
<b>10</b> Earth science educator	<b>23</b> LASL member
<b>11</b> Environmental science educator	<b>24</b> High school special education
<b>12</b> Environmental science educator	<b>25</b> Technology educator
<b>13</b> Astronomy or space science educator	<b>26</b> Representative from Laser Interferometer Gravitational-Wave Observatory (LIGO)
<b>14</b> University*	<b>27</b> 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"><li>• Solicit nominations from districts, charter schools, and approved organizations</li><li>• Release applications for draft reviewers</li><li>• Finalize selection of members</li></ul>
August - September	<ul style="list-style-type: none"><li>• Present committee and workgroup members to BESE</li><li>• Committee and workgroup meetings to review and revise standards</li></ul>
October - November	<ul style="list-style-type: none"><li>• Draft reviewers provide feedback</li><li>• Workgroups meet to revise</li></ul>
December - January	<ul style="list-style-type: none"><li>• Public comment portal</li><li>• Expert reviews</li></ul>
February	<ul style="list-style-type: none"><li>• Revisions and committee vote</li></ul>
March	<ul style="list-style-type: none"><li>• Submit proposal to BESE</li></ul>
June	<ul style="list-style-type: none"><li>• Teacher Leader Advisors develop transitional tools</li></ul>

# Review Process: Detailed Timeline

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

# Review Process: Public Comment

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



# 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.