

**BBES District Strategic Plan**  
**Action Plan #5: Years 2017-2022**  
**Action Plan for Curriculum and Instruction**

**Primary Goal:** Review the effectiveness of the current Science and Engineering program  
**Secondary Goals/Objectives:** Review and develop, as needed, a K-8 Science Curriculum  
 Review the technology integration plan for instruction  
 Develop a Professional Development Plan

<b><u>Strategies/Action Steps</u></b>	<b><u>Responsibilities</u></b>	<b><u>Resources (including budget impact, if any)</u></b>	<b><u>Timeline</u></b>
<ol style="list-style-type: none"> <li>1) Develop committees to identify Science curriculum and desired outcomes.</li> <li>2) Work with committees to develop new K-4 Science Curriculum as mandated by Next Generation Science Standards.</li> <li>3) Make recommendations for changes to curriculum.</li> <li>4) Work with 5-8 grade levels/subject areas to:               <ol style="list-style-type: none"> <li>a. Work with 5-8 grade Science Teachers to implement new curriculum.</li> <li>b. Work with 5-8 grade Science Teachers to implement new Houghton-Mifflin Science Program and Materials to support curriculum.</li> <li>c. Provide job-embedded, frequent professional development to further enhance knowledge of Science program.</li> <li>d. Develop use of technology embedded within curriculum</li> </ol> </li> <li>5) Work with K-4 grade levels/subject areas to:               <ol style="list-style-type: none"> <li>a. Work with K-4 grade teachers to implement new curriculum</li> <li>b. Provide job-embedded, frequent professional</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1) Development of committees</li> <li>2) Science Curriculum Development</li> <li>3) Professional Development</li> <li>4) Development of a new Houghton-Mifflin Science Program</li> <li>5) Prepare for the NJASK Science testing</li> <li>6) Review of STEAM curriculum</li> <li>7) Evaluate utilization of technology</li> <li>8) Work to communicate to the community via websites and presentations</li> </ol> <p>Suggested Sources:            Supervisor of Curriculum, School Administration, Subject Area Committees, Grade Level Committees, Professional Development Committee</p>	School Staff Parent Involvement Purchase of Houghton-Mifflin Science Program Technology Applications and Technology Implications Classroom Materials Professional Development – time and financial resources	Phase 1 – Action Steps 1 – 7 June 2017 - December 2017 <ul style="list-style-type: none"> <li>• June 2017, develop Science committee (Curriculum Writing)</li> <li>• July, August, September 2017, develop Science Curriculum and make recommendations for changes</li> <li>• August 2017, Curriculum Presentation to the Board of Education</li> <li>• September, October, November, December 2017, Work with 5-8 grade Science Teachers to implement Houghton-Mifflin Science Program and provide professional development opportunities for staff</li> <li>• September, October, November, December 2017, Work with K-4 grade teachers to implement new science curriculum and provide professional development opportunities for staff</li> <li>• November 2017, Provide</li> </ul>

<p>development to further enhance knowledge of Science program.</p> <ol style="list-style-type: none"> <li>6) Development of a curriculum website for communication of information and updates as it relates to implementation.</li> <li>7) Provide presentations to the community to discuss changes to the curriculum.</li> <li>8) Set yearly review of curriculum to ensure writing sequence is consistently aligned to Next Generation Science Standards.</li> <li>9) Make recommendations for changes to curriculum, if necessary.</li> <li>10) Work with K-4 grade levels/subject areas to: <ol style="list-style-type: none"> <li>a. Work with K-4 grade teachers to implement new curriculum.</li> <li>b. Work with K-4 grade teachers to implement new Houghton-Mifflin Science Program and Materials to support curriculum.</li> <li>c. Provide job-embedded, frequent professional development to further enhance knowledge of Science program.</li> </ol> </li> <li>11) Work with 5-8 grade levels/subject areas to: <ol style="list-style-type: none"> <li>a. Work with 5-8 teachers to provide job-embedded, frequent professional development to further enhance knowledge of Science program.</li> </ol> </li> <li>12) Provide presentations to the community to discuss changes to the curriculum.</li> <li>13) Set yearly review of curriculum to ensure writing sequence is consistently aligned to Next Generation Science Standards.</li> <li>14) Make recommendations for changes to curriculum, if necessary.</li> </ol>			<p>presentations to the community to discuss changes to the curriculum</p> <p>Phase 2 – Action Steps 4 – 5 January 2018 – June 2018</p> <ul style="list-style-type: none"> <li>• January - June 2018, Work with 5-8 grade Science Teachers to implement Houghton-Mifflin Science Program and provide professional development opportunities for all staff</li> </ul> <p>Phase 3 – Action Steps 8 – 12 July 2018 – December 2018</p> <ul style="list-style-type: none"> <li>• July and August 2018, review Science curriculum to ensure alignment to NGSS</li> <li>• August 2018, make recommendations for changes, if necessary</li> <li>• August 2018, Curriculum Presentation to the Board of Education</li> <li>• September, October, November, December 2018, work with K-4 grade teachers to implement Houghton-Mifflin Science Program and provide professional development opportunities for all staff</li> <li>• November 2018, Provide presentation to the community to discuss changes to the reading curriculum</li> </ul> <p>Phase 4 – Action Steps 10 &amp; 11 January 2019 – June 2019</p> <ul style="list-style-type: none"> <li>• January - June 2019, work with K-4 grade Science</li> </ul>
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<p>15) Develop committees to identify STEAM curriculum and desired outcomes.</p> <p>16) Make recommendations for changes to curriculum, if necessary.</p> <p>17) Work with STEAM teachers to:</p> <ol style="list-style-type: none"> <li>a. Work with STEAM teachers to implement new curriculum.</li> <li>b. Provide job-embedded, frequent professional development to further enhance knowledge of STEAM program.</li> </ol> <p>18) Provide presentations to the community to discuss changes to the curriculum.</p> <p>19) Work with K-8 grade levels/subject areas to provide job-embedded, frequent professional development to further enhance knowledge of Science program.</p> <p>20) Set yearly review of curriculum to ensure writing sequence is consistently aligned to Next Generation Science Standards.</p> <p>21) Make recommendations for changes to curriculum, if necessary.</p> <p>22) Set yearly review of curriculum of Science and STEAM curriculum.</p> <p>23) Make recommendations for changes to curriculum, if necessary.</p>			<p>Teachers to implement Houghton-Mifflin Science Program and provide professional development opportunities for staff</p> <p>Phase 5 – Action Steps 13 – 19 July 2019 – December 2019</p> <ul style="list-style-type: none"> <li>• July and August 2019, review Science curriculum to ensure alignment to NGSS</li> <li>• July 2019, develop STEAM committee (Curriculum Writing)</li> <li>• July, August 2019, review STEAM Curriculum and make recommendations for changes</li> <li>• August 2019, make recommendations for changes to Science Curriculum, if necessary</li> <li>• August 2019, Curriculum Presentation to the Board of Education</li> <li>• September, October, November, December 2019, provide professional development opportunities in Science and STEAM for staff</li> </ul> <p>Phase 6 – Action Steps 20 – 23 January 2020 and Beyond</p> <ul style="list-style-type: none"> <li>• Provide Professional Development for new programs, and to address the changes in programs</li> <li>• Review curriculum on a yearly basis</li> <li>• Provide presentations to the community to discuss changes to the curriculum</li> </ul>
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Implications for Professional Development – All staff must have working knowledge of Next Generation Science Standards and the Houghton-Mifflin Science program, and demonstration of this will be assessed through development of lesson plans and through teacher evaluation. All staff must have working knowledge of programmatic changes and this will be assessed during teacher evaluations and through the use of Professional Growth Plans. STEAM teachers must evaluate program and implement changes to support NGSS.

Implications for Stakeholders – All staff must be invited into this process and communication through each phase is mandatory. All community members must be made aware of the changes in proactive presentations. A minimum of two presentations per year and development of a website for communication of information and updates as it relates to implementation.

#### Review Each Phase

- 1) Phase 1 – Committees are developed and procedures are put in place to develop a K-8 curriculum to support the Next Generation Science Standards. Professional development focuses on the implementation of the Houghton-Mifflin Science program for grades 5-8 and implementation of the NGSS for teachers K-4.
- 2) Phase 2 – Continuation of professional development which focuses on the implementation of the Houghton-Mifflin Science program for grades 5-8 and implementation of the NGSS for teachers K-4.
- 3) Phase 3 – Review of the science curriculum to ensure compliance with NGSS. Professional development focuses on the implementation of the Houghton-Mifflin Science program for grades K-4 and implementation of the NGSS for teachers 5-8.
- 4) Phase 4 – Continuation of professional development which focuses on the implementation of the Houghton-Mifflin Science program for grades K-4 and implementation of the NGSS for teachers 5-8.
- 5) Phase 5 – Review of the science curriculum and STEAM curriculum to ensure compliance with NGSS. Professional development focuses on the implementation of the NGSS and STEAM related projects for all staff.
- 6) Phase 6 – Curriculum review and professional development where needed.