

Guidelines for Content Advisor Feedback

Please review the draft recommendations for the science Texas Essential Knowledge and Skills (TEKS) for kindergarten–grade 8.

There is no specific format required for your feedback. When referencing specific portions of the TEKS, please indicate the grade level and the specific letter/number of the standard to which you are referring, as appropriate.

GUIDING QUESTIONS

1. Does each grade level follow a complete and logical development of science concepts presented? If not, what suggestions do you have for improvement? **Yes**
2. Do the standards for the grade(s) adequately address scientific concepts? If not, please give examples of how the standards might be improved. **Yes for the most part. Please consider the following:**

Kinder- leave K.6B explore interactions between magnets and various objects in the new TEKS. This would serve as an intro to magnets to 1st grade could dive deeper by adding the push pull and prediction piece as recommended by the work group.

1st grade: 1.9A change “document” to describe. Students in 1st grade are still developing their writing skills and document would not be grade appropriate. Describe is more grade level appropriate for 1st grade.

2nd grade:

2.5A- please consider adding gases to the states of matter. If students are expected to know that Sun is composed of gases then gases need to be added to 2.5A

2.8- Please consider introducing the basic stages of the water cycle.

- Add an SE between the currently 2.8B and 2.8C
- Making 2nd grade 2.8A, 2.8B, 2.8C, 2.8D
- 2.8C Describe and model the stages of the water cycle including evaporation, condensation and precipitation as connected to weather patterns.
- 2.8D- measure, record and graph weather information including temperature and precipitation.
- The proposed 2.8C would serve as prerequisite to the 4th grade SE 4.9A and would be an appropriate fit for 2nd grade.

3rd grade:

3.5A Consider changing the “justify” to explain. Explain is a more appropriate verb for 3rd grade students.

3.12A- Leave current SE 3.10A as it is- 3.12A explore how structures and functions of plants and animals allow them to survive.

4th grade:

4.6A- Consider changing proposed SE to “investigate and record observations of the forces of gravity, magnetism and friction”. This would allow for extended these concepts into 4.6B where students design their own descriptive investigation to explore the effects of gravity, friction and magnetism on an object

4.12A explore how structures and functions of plants and animals allow them to survive in a particular environment.

Many Districts use habitats to teach the organism and environment TEKS. By teaching animals only in 3rd grade and plants only in 4th grade, this hinders this deeper exploration into various habitats. 4.12B asks students to differentiate between inherited and acquired physical traits of organism...by keeping plants and animals in 3.12A and 4.12A would allow students to explore these SEs in a more comprehensive manner.

5th grade- no considerations

6th grade:

6.7A Consider moving chemical potential energy from 6th grade to 7th grade. Students compare chemical and physical changes in 7th grade.

6.7A compare and contrast kinetic energy and gravitational potential and elastic potential energy.

6.7B- Please consider re-writing the SE and remove the examples of food webs, photosynthesis and amusement park rides. These examples do not fit with the Knowledge and Skill statement and are a loose connection that were in the existing TEKS.

6.10- Please consider adding a 6.10B

6.10B- demonstrate energy transformations such as energy in a flashlight battery changes from chemical energy to electrical energy to light energy.

7th grade:

7.10B- Please consider removing or re-writing so it is not implying global warming or climate change. Due to the debate within the scientific community on these topics, this may not be appropriate for this grade level

8th grade:

8.10B Please consider removing or re-wording. There is debate in the science community over climate change and this may not be appropriate for this grade level.

3. Is the level of rigor appropriate for each grade level? If not, please provide suggestions for areas where improvements are needed.
Please see suggestions above
4. Are the TEKS aligned horizontally and vertically? If not, what gaps or concepts are missing that should be addressed? Yes
5. Does each grade level include sufficient standards focused on classroom and outdoor investigations? Yes
6. Are the student expectations clear and specific? If not, please give examples of how the language might be improved. Yes
7. Are there student expectations that are not essential or unnecessarily duplicative and can be eliminated? If so, please identify by grade level and student expectation number, e.g., 1.7.B (Grade 1, student expectation (7)(B)). No
8. Do you have any other suggestions for ways in which the elementary and middle school TEKS can be improved? Just the suggestions above.

In addition to the suggestions for K-8 above, please see below for consideration of Environmental Science”

12C, 12D, and 12E seem to be overlapping TEKS to the 12A and 12B. They are somewhat redundant to those SEs.