

## Guidelines for Content Advisor Feedback

Please review the final 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. For example, 1.7.B (Grade 1, student expectation (7)(B)).

### GUIDING QUESTIONS

1. Do the final recommendations adequately address scientific concepts? If not, please give examples of how the standards may be improved.
2. Are the final recommendations aligned vertically and horizontally and don't create gaps in scientific concepts and skills? If not, what gaps or concepts are still missing that should be addressed?
3. Are the student expectations clear and specific? If not, please give examples of how the language might be improved.
4. Do you have any other suggestions for ways in which the elementary and middle school TEKS can be improved?

### K-2

Generally, I am pleased with all the proposed changes to the K-2 TEKS. They flow from grade to grade nicely building on each other, nothing seems superfluous.

2A—like the addition of the limitation of models. Even college students, much less K-2 students, have trouble assimilating data that doesn't agree with the models they are taught.

3A—I love “listen actively”

5. I appreciate the inclusion of reoccurring themes and concepts—the TEKS in general seem to be arranged so that students are exposed to most of the themes and concepts very early and as the grade level increases, so does the level of detail and complexity of the models.

5G—I appreciate the inclusion of “factors that cause organisms to change.” Many students that I have encountered seem to separate the environment from the organism—not realizing how each affects the other.

6A—I appreciate how the classification of matter moves from very basic physical properties in K, to larger and smaller in 1, to flexibility and temperature and state in 2.

6C—really like the addition in grade 1 of systems being made of building blocks—that concept sets the student up to understand much better chemical, biological, and engineering concepts that will come up later.

7—very much approve the addition of “energy” to force and motion.

7A—I appreciate how the ideas of force and motion are initiated by studying magnets. I think it's a great model to build from.

7B—I agree that the experiments should be descriptive in nature

8. I like the addition of “energy is everywhere”

8A—like that the focus of energy studies moves from light to heat to sound over K-2

9—I’m not sure I understand the deletion of collecting weather data, unless due to time constraints. I think collecting data and looking at trends is useful.

10—I see weather come back here—with data collection beginning in grade 2—appropriate, I think!

10C—addition of description of air is good

11A—I like the addition of practical uses

12—I agree with the wording changes in 12.

### **3-5**

As with K-2, I like all the changes and adjustments to the 3-5 TEKS and feel that they are clear, adequate, and aligned.

5—as I mentioned above, I like the addition of the reoccurring themes.

6A—physical properties continue to increase in complexity with mass, magnetism added for grade 3, density added for 4, and volume, solubility, conductivity in 5.

6C for grade 4—I like the introduction of conservation of matter so early

6D—I like the changes to the wording—much clearer and the addition of the example of a balloon.

9—the wording clarification really helps here

10C—I approve of the move to differentiating between weather and climate to grade 4

11—I like all the changes submitted for parts of 11

### **6-8**

As with K-2 and 3-5, I like all the changes and adjustments to the 6-8 TEKS and feel that they are clear, adequate, and aligned.

5—again—really like the inclusion of the recurring themes.

6—I like all the word smithing on #6

8—really like the inclusion of longitudinal waves—as I’ve mentioned before, this is something that some of my college students struggle with. Their knowledge of waves is limited to light—they are not familiar with how sound waves behave.

10. I appreciate the clarification regarding types of rocks on 10C grade 6 and the specificity of solar and atmospheric energy in 10C grade 8

12B grade 8—I like the rewrite much better than the original.

12C—moving biodiversity and adding sustainability from 7 to 8 is good

13—the rewrite of the standard is much better

In conclusion, --I didn’t see anything in these proposed TEK changes that I disagreed with. I appreciate all the work the various groups have contributed. I’m excited that K-12 students in Texas are getting such excellent science education.