# Technology Applications Work Group A Recommendations

Work Group A met in July 2021 to develop recommendations for the review and revision of the technology applications Texas Essential Knowledge and Skills (TEKS). In recognition of the opportunities and threats presented by our increasing digital world, and to be compliant with current legislation, Work Group A suggests the following recommendations for revising the TEKS. The table below outlines the focus areas, recommendations, and rationales developed from the technology applications TEKS survey, content advisor consensus recommendations, and Work Group A.

| Focus Area | Recommendations | Rationale |
|---|---|---|
| Introduction to the TEKS | The introduction to the technology applications TEKS should incorporate language that allows teachers the flexibility to incorporate new and emerging technology without being too specific to existing devices and technology. | Technology evolves at a rapid pace. This recommendation allows teachers the flexibility to include new technologies into instruction, while not limiting certain devices. |
| | Content advisors recommended including language in the introduction regarding districts' flexibility in offering technology applications as an integrated or standalone course. Work Group A did not come to consensus regarding this recommendation. There were multiple viewpoints regarding this issue. One viewpoint is to not include sentences that recommend flexibility of offering technology applications integrated within all content areas in the introduction. The members who held this viewpoint expressed concern that if districts are encouraged to be flexible, they will not employ technology applications teachers. A second viewpoint is to include the language recommended by the content advisors because some district may not have the resources to offer standalone technology applications classes. Finally, a third viewpoint is to incorporate language that encourages districts to have a standalone class/course. | Work Group A would prefer that technology applications TEKS be taught by a technology applications early childhood-grade 12 certified teacher as a separate standalone course of instruction, |
| | TEC §28.002(c-3), which outlines requirements for the technology applications essential knowledge and skills, should be addressed in the introduction. | |

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|---|---|---|
| Conceptual framework | Align to Computer Science Teachers Association (CSTA) and International Society for Technology in Education (ISTE) standards<br><br>Use the CSTA concepts and sub-concepts as a guide to formulate new technology applications strands for the technology applications TEKS<br><br>Starting from CSTA standards, align/revise/remove existing technology applications TEKS to fit into new strands where applicable to ensure concepts required by TEC §28.002(c-3) are incorporated: coding, computer programming, computational thinking, and cybersecurity. Additionally, revise the technology applications TEKS using the ISTE Standards for Students as a lens to ensure all important anad3 Tw 11.d [(c)-1brscrit. tsdioay | |

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| Vertical alignment | Use CSTA progression chart to guide vertical alignment.<br><br>Vertically align the technology applications TEKS from kindergarten through grade 8 to support high school courses. | The CSTA progression chart serves as a good frame of reference to ensure vertical alignment and that technology skills are developmentally appropriate by grade level. It also allows for preparation for and alignment with the high school courses. |
| Digital citizenship/leadership | Review the health education standards regarding digital citizenship to ensure consistency and to reinforce important concepts<br><br>i9.8371.04 -0 0 11. (a)-LBody.3 (l)-3.44 | |

| Focus Area | Recommendations | Rationale |
|---|---|---|
| Process for TEKS review | Work Group A recommends the following process for revising the technology applications TEKS:<br><br>1. Use the CSTA concepts and subconcepts as a guide to formulate new technology applications TEKS strands.<br><br>2. Starting from CSTA standards, align/revise/remove existing technology applications TEKS to fit into new strands, where applicable, to ensure concepts required by TEC §28.002(c-3) are incorporated: coding, computer | |

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