

Technology Vertical Alignment, Birth - Grade 2

Grade Level	Infant, Toddler and Three-Year Old	Prekindergarten-PK4**	Kindergarten	Grade 1	Grade 2
Standards	Texas Infant, Toddler, and Three-Year Old Early Learning Guidelines	Texas Prekindergarten Guidelines	Texas Essential Knowledge and Skills (TEKS)*	Texas Essential Knowledge and Skills (TEKS)*	Texas Essential Knowledge and Skills (TEKS)*
Domain / Content Area	Cognitive Development ~Language and Communication Development	X. Technology Domain	Technology Applications AND Health Education	Technology Applications AND Health Education	Technology Applications AND Health Education
Sub- Domains / Strands	Exploration and Discovery (ED) Problem Solving (PS) Memory (ME) ~Communication and Speaking (CS)	A. Technology and Devices	 Creativity and innovation Communication and collaboration Research and information fluency Critical thinking, problem solving, and decision making Digital citizenship Technology operations and concepts Injury and violence 	 Creativity and innovation Communication and collaboration Research and information fluency Critical thinking, problem solving, and decision making Digital citizenship Technology operations and concepts Injury and violence 	 Creativity and innovation Communication and collaboration Research and information fluency Critical thinking, problem solving, and decision making Digital citizenship Technology operations and concepts Injury and violence

^{*}Refers to the **Technology Applications** and **Health Education** TEKS adopted in 2022

^{**}There are no PK3 outcomes for this domain of learning.

CREATIVITY AND INNOVATION

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(1) The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to:	Grade 1 1(1) The student uses creative thinking and innovation processes to construct knowledge and develop digital products. The student is expected to:	Grade 2 2(1) The student uses creative thinking and innovation processes to construct knowledge and develop digital products. The student is expected to:
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations. ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.	X.A.3 Child uses digital learning applications to contribute to class-made digital products that express own ideas, as appropriate.	K(1)(A) apply prior knowledge to develop new ideas, products, and processes.	1(1)(A) apply prior knowledge to develop new ideas, products, and processes.	2(1)(A) apply prior knowledge to develop new ideas, products, and processes.
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations. ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.	X.A.3 Child uses digital learning applications to contribute to class-made digital products that express own ideas, as appropriate.	K(1)(B) create original products using a variety of resources.	1(1)(B) create original products using a variety of resources.	2(1)(B) create original products using a variety of resources.

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(1) The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to:	Grade 1 1(1) The student uses creative thinking and innovation processes to construct knowledge and develop digital products. The student is expected to:	Grade 2 2(1) The student uses creative thinking and innovation processes to construct knowledge and develop digital products. The student is expected to:
No standard present in the vertical progression	No standard present in the vertical progression	K(1)(C) explore virtual environments, simulations, models, and programming languages to enhance learning.	1(1)(C) explore virtual environments, simulations, models, and programming languages to enhance learning.	2(1)(C) explore virtual environments, simulations, models, and programming languages to enhance learning.
No standard present in the vertical progression	No standard present in the vertical progression	K(1)(D) create and execute steps to accomplish a task.	(1)(1)(D) create and execute steps to accomplish a task.	2(1)(D) create and execute steps to accomplish a task.
No standard present in the vertical progression	No standard present in the vertical progression	K(1)(E) evaluate and modify steps to accomplish a task.	1(1)(E) evaluate and modify steps to accomplish a task.	2(1)(E) evaluate and modify steps to accomplish a task.

COMMUNICATION AND COLLABORATION

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(2) The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:	Grade 1 1(2) The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:	Grade 2 2(2) The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:
No standard present in the vertical progression	No standard present in the vertical progression	K(2)(A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally.	1(2)(A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally.	2(2)(A) use communication tools that allow for anytime, anywhere access to interact, collaborate, or publish with peers locally and globally.
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations. ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.	X.A.4 Child uses technology to access appropriate information with adult assistance.	K(2)(B) participate in digital environments to develop cultural understanding by interacting with learners of multiple cultures.	1(2)(B) participate in digital environments to develop cultural understanding by interacting with learners of multiple cultures.	2(2)(B) participate in digital environments to develop cultural understanding by interacting with learners of multiple cultures.
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations.	X.A.3 Child uses digital learning applications to contribute to class-made digital products that express own ideas, as appropriate.	K(2)(C) format digital information, including font attributes, color, white space, graphics, and animation for a defined audience and communication medium.	1(2)(C) format digital information, including font attributes, color, white space, graphics, and animation, for a defined audience and communication medium.	2(2)(C) format digital information, including font attributes, color, white space, graphics, and animation, for a defined audience and communication medium.

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(2) The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:	Grade 1 1(2) The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:	Grade 2 2(2) The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:
ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.				
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations. ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.	X.A.3 Child uses digital learning applications to contribute to class-made digital products that express own ideas, as appropriate.	K(2)(D) select, store, and deliver products using a variety of media, formats, devices, and virtual environments.	1(2)(D) select, store, and deliver products using a variety of media, formats, devices, and virtual environments.	2(2)(D) select, store, and deliver products using a variety of media, formats, devices, and virtual environments.

RESEARCH AND INFORMATION FLUENCY

Infant, Toddler and Three- Year Old	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(3) The student acquires and evaluates digital content. The student is expected to:	Grade 1 1(3) The student acquires and evaluates digital content. The student is expected to:	Grade 2 2(3) The student acquires and evaluates digital content. The student is expected to:
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations. ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.	X.A.4 Child uses technology to access appropriate information with adult assistance.	K(3)(A) use search strategies to access information to guide inquiry.	1(3)(A) use search strategies to access information to guide inquiry.	2(3)(A) use search strategies to access information to guide inquiry.
PS.1. Experiments with different uses for objects. PS.3. Applies knowledge to new situations. ME.1. Shows ability to acquire and process new information. ME.3. Recalls and uses information in new situations.	X.A.4 Child uses technology to access appropriate information with adult assistance.	K(3)(B) use research skills to build a knowledge base regarding a topic, task, or assignment.	1(3)(B) use research skills to build a knowledge base regarding a topic, task, or assignment.	2(3)(B) use research skills to build a knowledge base regarding a topic, task or assignment.
No standard present in the vertical progression	No standard present in the vertical progression	K(3)(C) evaluate the usefulness of acquired digital content.	1(3)(C) evaluate the usefulness of acquired digital content.	2(3)(C) evaluate the usefulness of acquired digital content.

CRITICAL THINKING, PROBLEM SOLVING, AND DECISION MAKING

Infant, Toddler and Three- Year Old N/A	Prekindergarten-PK4 N/A	Kindergarten K(4) The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:	Grade 1 1(4) The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:	Grade 2 2(4) The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:
No standard present in the vertical progression	No standard present in the vertical progression	K(4)(A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem.	1(4)(A) identify what is known and what needs to be known and what needs to be known regarding a problem and explain the steps to solve the problem.	2(4)(A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem.
No standard present in the vertical progression	No standard present in the vertical progression	K(4)(B) evaluate the appropriateness of a digital tool to achieve the desired product.	1(4)(B) evaluate the appropriateness of a digital tool to achieve the desired product.	2(4)(B) evaluate the appropriateness of a digital tool to achieve the desired product.
No standard present in the vertical progression	No standard present in the vertical progression	K(4)(C) evaluate products prior to final submission.	1(4)(C) evaluate products prior to final submission.	2(4)(C) evaluate products prior to final submission.
No standard present in the vertical progression	No standard present in the vertical progression	K(4)(D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages.	1(4)(D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charters multimedia, simulations, models, and programming languages.	2(4)(D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charts, multimedia, simulations, models and programming languages.

DIGITAL CITIZENSHIP

Infant, Toddler and Three- Year Old Problem Solving (PS)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(5) The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: AND K(11) Health and Wellness: Injury and violence prevention and safetydigital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:	Grade 1 1(5) The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: AND 1(12) Health and Wellness: Injury and violence prevention and safetydigital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:	Grade 2 2(5) The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to: AND 2(12) Health and Wellness: Injury and violence prevention and safetydigital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:
PS.1. Experiments with different uses for objects.	X.A.5 Child practices safe behavior while using digital tools and resources.	K(5)(A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment.	1(5)(A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment.	2(5)(A) adhere to acceptable use policies reflecting appropriate behavior in a digital environment.
PS.1. Experiments with different uses for objects.	X.A.5 Child practices safe behavior while using digital tools and resources.	K(5)(B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws.	1(5)(B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws.	2(5)(B) comply with acceptable digital safety rules, fair use guidelines, and copyright laws.
PS.1. Experiments with different uses for objects.	X.A.5 Child practices safe behavior while using digital tools and resources.	K(5)(C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.	1(5)(C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.	2(5)(C) practice the responsible use of digital information regarding intellectual property, including software, text, images, audio, and video.

and media. The citizenship and media. Terstands how to student understands how	
be a safe and responsible citizen in digital and online environments. The student is expected to: 2(12)(A) identify unsafe requests made in a digital online environment and has to feel bullied, ole, or unsafe in a line 2(12)(B) explain why obtaining help, especially from parents or other true adults, is critical when making decisions regarding digital and online use. 2(12)(C) identify consequences that result	ble line ent is al or how on.
	environments. The student is expected to: 2(12)(A) identify unsafe requests made in a digital and online use. 2(12)(B) explain why obtaining help, especially from parents or other truadults, is critical when making decisions regardidigital and online use.

TECHNOLOGY OPERATIONS AND CONCEPTS

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME) ~Communication and Speaking (CS)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:	Grade 1 1(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:	Grade 2 2(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:
PS.1. Experiments with different uses for objects. ME.3. Recalls and uses information in new situations. CS.1. Uses consistent sounds, gestures, or words to communicate for a variety of purposes.	X.A.2 Child uses and names a variety of digital tools that support and enhance learning.	K(6)(A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies.	1(6)(A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies.	2(6)(A) use appropriate terminology regarding basic hardware, software applications, programs, networking, virtual environments, and emerging technologies.
PS.1. Experiments with different uses for objects. ME.3. Recalls and uses information in new situations. CS.1. Uses consistent sounds, gestures, or words to communicate for a variety of purposes.	X.A.2 Child uses and names a variety of digital tools that support and enhance learning.	K(6)(B) use appropriate digital tools and resources for storage, access, file management, collaboration, and designing solutions to problems.	1(6)(B) use appropriate digital tools and resources for storage, access, file management, collaboration, and designing solutions to problems.	2(6)(B) use appropriate digital tools and resources for storage, access, file management, collaboration, and designing solutions to problems.

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME) ~Communication and Speaking (CS)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:	Grade 1 1(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:	Grade 2 2(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:
PS.1. Experiments with different uses for objects.	X.A.1 Child opens and navigates through digital learning applications and programs, when appropriate.	K(6)(C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files.	1(6)(C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files.	2(6)(C) perform basic software application functions, including opening an application and creating, modifying, printing, and saving files.
PS.1. Experiments with different uses for objects. ME.3. Recalls and uses information in new situations. CS.1. Uses consistent sounds, gestures, or words to communicate for a variety of purposes.	X.A.2 Child uses and names a variety of digital tools that support and enhance learning.	K(6)(D) use a variety of input, output, and storage devices.	1(6)(D) use a variety of input, output, and storage devices.	2(6)(D) use a variety of input, output, and storage devices.
No standard present in the vertical progression	No standard present in the vertical progression	K(6)(E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten- Grade 2 learning.	1(6)(E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten- Grade 2 learning.	2(6)(E) use proper keyboarding techniques such as ergonomically correct hand and body positions appropriate for Kindergarten- Grade 2 learning.

Infant, Toddler and Three- Year Old Problem Solving (PS) Memory (ME) ~Communication and Speaking (CS)	Prekindergarten-PK4 A. Technology and Devices	Kindergarten K(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:	Grade 1 1(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:	Grade 2 2(6) The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:
No standard present in the vertical progression	No standard present in the vertical progression	K(6)(F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning.	1(6)(F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning.	2(6)(F) demonstrate keyboarding techniques for operating the alphabetic, numeric, punctuation, and symbol keys appropriate for Kindergarten-Grade 2 learning.
No standard present in the vertical progression	No standard present in the vertical progression	K(6)(G) use the help feature online and in applications.	1(6)(G) use the help feature online and in applications.	2(6)(G) use the help feature online and in applications.

INJURY AND VIOLENCE PREVENTION AND SAFETY

Infant, Toddler and Three- Year Old N/A	Prekindergarten-PK4 N/A	Kindergarten K(11) Injury and violence prevention and safetydigital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:	Grade 1 1(12) Injury and violence prevention and safetydigital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:	Grade 2 2(12) Injury and violence prevention and safetydigital citizenship and media. The student understands how to be a safe and responsible citizen in digital and online environments. The student is expected to:
No standard present in the vertical progression	No standard present in the vertical progression	K(11)(A) identify situations one should get help from a teacher when, parent, or other trusted adult when made to feel bullied, uncomfortable, or unsafe in a digital or online environment.	1(12)(A) demonstrate how to get help from a teacher, parent, or other trusted adult when made to feel bullied, uncomfortable, or unsafe in a digital or online environment.	2(12)(A) identify unsafe requests made in a digital or online environment and how to take appropriate action.
No standard present in the vertical progression	No standard present in the vertical progression	No standard present in the vertical progression	No standard present in the vertical progression	2(12)(B) explain why obtaining help, especially from parents or other trusted adults, is critical when making decisions regarding digital and online use.
No standard present in the vertical progression	No standard present in the vertical progression	No standard present in the vertical progression	No standard present in the vertical progression	2(12)(C) identify consequences that result from cyberbullying and inappropriate digital and online usage.