# Trinity Lutheran School Technology Curriculum

#### Rationale based on Scripture

At Trinity, technology is a part of the Christ-centered education of the whole child. The children will learn how to use technology in a God-pleasing and responsible way.

Knowledge of technology use is essential for our students in today's society as they utilize their God-given abilities to their fullest potential to glorify Him. This knowledge will include an awareness of our ever-advancing technology and the proper etiquette for using these various devices. Through the Holy Spirit, by using technology our students will be able to most effectively follow through with the mission of our school and our Lord's command to "go and make disciples of all nations" (Matthew 28:19). Technology is considered a tool that facilitates and enhances instruction of the other content areas while also exposing students to real-world skills that will be used in higher education and the workplace. We will offer technology education in order to give our students an excellent, applicable, and thorough education.

## Exit goals for graduation

Students will demonstrate proficiency, understanding, and/or commitment to the following set of exit goals upon graduation. The level of proficiency of these exit goals will be dependent upon the individual gifts and effort of the student and at what grade the student started attending Trinity.

Through technology instruction, teachers strive to lead each child to:

- 1. Demonstrate a sound understanding of various computer programs, including:
  - a. Google Docs, Sheets and Slides
  - b. Photo/picture editing software
  - c. Web page editing software
- 2. Type 40 words per minute with 95% accuracy without looking at the keys.
- 3. Proficiently use various hardware such as:
  - a. Computer
  - b. Printer
  - c. Flash drive
- 4. Navigate through the internet and be able to locate needed information.
- 5. Utilize the internet for communication purposes.
- 6. Upkeep an organized electronic system of their files.
- 7. Correctly use the intellectual property of others.
- 8. Demonstrate knowledge of internet safety and proper etiquette for the internet and electronic devices.
  - a. Awareness of consequences for posting inappropriate material
  - b. Cyber bullying
  - c. Acting as a Christian on the internet
  - d. Managing time online and with devices in a God pleasing way
- 9. List ways that technology can be used to further Christ's kingdom by making disciples of all nations.

## Grade level measurable objectives

At the end of each school year, students will demonstrate proficiency, understanding, and/or commitment to the following set of grade specific measurable objectives in these classifications: knowledge, skills, and attitudes.

The level of proficiency of these measurable objectives will be dependent upon the individual gifts and effort of the student and at what time of year the student started attending Trinity.

Category	во	Objective	P	K	1	2	3	4	5	6	7	8
	1	Turn on computer, Chromebook, or tablet and log in		Ι	R	R	М	М	M	M	M	М
	2	Use pointing device such as a mouse, touchscreen, or touchpad to manipulate shapes, icons; click on URLs, radio buttons, check boxes; use scroll bar			I	R	М	М	M	М	М	М
	3	Use desktop icons, windows, and menus to open applications and documents			1	R	М	М	M	M	M	М
	4	File management – naming, saving, organizing folders, deleting, recovering (local and cloud-based)					I	R	M	M	M	М
	5	Explain and use age-appropriate online tools and resources			I	R	М	М	M	M	M	M
Basic Operations (BO)	6	<ul> <li>Weyboarding</li> <li>Use proper posture and ergonomics</li> <li>Locate and use letter and numbers keys with left and right hand placement</li> <li>Locate and use correct finger, hand for space bar, return/enter and shift key</li> <li>Gain proficiency and speed in touch typing (WPM)</li> </ul>			I	R	R	R	М	М	М	М
	7	Utilize basic troubleshooting steps to solve technical problems independently (i.e. wireless connections, updates, frozen display)			I	R	R	R	M	М	М	М
	8	Customize display to increase productivity (browser and OS)									_	R
	9	Use keyboard shortcuts to operate the computer (i.e. ctrl-C, ctrl-V, ctrl-X, ctrl-2, ctrl-I, ctrl-enter)									Ι	R
	10	Identify and assess the capabilities and limitations of emerging technologies									Ι	R
I-Intro	duce	R-Reinforce M-Mastery (A	Abil	ity	to	Tea	ch	Oth	ners	s)		

Category	WP	Objective	P	K	1	2	3	4	5	6	7	8
	1	Use a word processing application to write, edit, and save simple assignments					-	R	М	М	М	М
Word Processing (WP)	2	Use menu/toolbar functions (e.g. font/size/style/, line spacing , margins) to format, edit and submit a document					-	R	М	М	M	М

	3	Highlight text, copy and paste text					I	R	М	M	M	M
	4	Copy and paste images within the document and from outside sources; Insert and size a graphic in a document					I	R	M	M	M	M
	5	Proofread and edit writing using appropriate resources (e.g. dictionary, spell checker, grammar, and thesaurus)					_	R	M	M	M	M
	6	Demonstrate use of intermediate features in word processing application (e.g., tabs, indents, headers and footers, endnotes, bullet and numbering, tables)							I	R	M	M
	7	Apply advanced formatting and page layout features when appropriate (e.g., columns, templates, and styles) to improve the appearance of documents and materials					_	R	M	М	M	М
	8	Use the comment function for peer editing of documents					I	R	M	М	М	M
	9	Use revision history or "track changes" for peer editing of document									I	R
	10	Format a research paper correctly using a specific format (e.g. MLA)									I	R
I-Intro	duce	R-Reinforce M-Mastery (A	Abil	ity	to <sup>-</sup>	Геа	ch	Oth	ers	s)		

Category	SS	Objective	P	K	1	2	3	4	5	6	7	8
	1	Demonstrate an understanding of the spreadsheet as a tool to record, organize and graph information								R	M	M
	2	Identify and explain terms and concepts related to spreadsheets (i.e. cell, column, row, values, labels, chart graph)							-	R	М	М
Spreadsheet -	3	Enter/edit data in spreadsheets and perform calculations using formulas							1	R	M	M
Tables/Charts and Graphs (SS)	4	Use mathematical symbols e.g. + add, -minus, *multiply, /divide, ^exponents							I	R	M	M
	5	Use spreadsheets to make predictions, solve problems and draw conclusions									_	R
	6	Use spreadsheets to calculate, graph, organize, and present data, choosing the most appropriate graph/chart type to represent given data							I	R	М	М
	7	Enter formulas and functions, using the autofill									ı	R

I-Introdu	се	R-Reinforce M-Mastery (	Abi	lity	to <sup>-</sup>	Геа	ch	Oth	ner	s)		
	10	Formats labels, legends, axis, etc. of graphs to more clearly present data									I	R
	9	Use multiple sheets within a workbook									I	R
	8	Use sort, filter, find, and other functions of a spreadsheet to maximize productivity									I	R
		feature in a spreadsheet										

Category	MP	Objective	Р	K	1	2	3	4	5	6	7	8
	1	Create, edit and format text on a slide					Ι	R	M	M	M	M
	2	Create a series of slides and organize them to present research or convey an idea					_	R	M	M	M	M
	3	Copy and paste or import graphics; change their size and position on a slide					Ī	R	М	M	М	M
	4	Use camera, painting, or drawing tools/applications to create and edit images and video							I	R	M	М
	5	Watch online videos and use play, pause, rewind and forward buttons			I	R	М	М	M	M	M	М
Multimedia and Presentation Tools (MP)	6	Create presentations for a variety of audiences and purposes with use of appropriate transitions and animations to add interest and hyperlinks to credit sources							I	R	М	М
	7	Select wisely from a variety of presentation tools (Slides, PowerPoint, Prezi, Bubbl.us, Screencast-O-Matic, etc.) and has sound rationale for the choice									I	R
	8	Use note-taking skills while viewing online videos and using the play, pause, rewind, and stop buttons							I	R	M	M
	9	Generate video, upload, and share it appropriately for educational purposes							I	R	M	M
	10	Design a website for a specific purpose, with clear organization and easy navigation									I	R
I-Introd	uce	R-Reinforce M-Mastery (A	۱id	ity	to	Теа	ch	Oth	ners	s)		

Category	DC	Objective	P	K	1	2	3	4	5	6	7	8
Digital	1	Explain and demonstrate compliance with classroom,		_	R	R	М	M	М	M	М	М

Citizenship (DC)		school rules (Acceptable Use Policy) regarding responsible use of computers and networks										
	2	Explain responsible uses of technology and digital information; describe possible consequences of inappropriate use			I	R	М	М	М	M	М	М
	3	Explain Fair Use Guidelines for the use of copyrighted materials, (e.g. text, images, music, video in student projects) and giving credit to media creator					-	R	М	M	М	М
	4	Identify and explain the strategies for the safe and efficient use of computers (e.g. passwords, virus protection software, spam filters, popup blockers)					I	R	М	M	М	М
	5	Demonstrate safe email practices, recognition of the potentially public exposure of email and appropriate email etiquette					ı	R	М	М	М	М
	6	Identify cyber bullying and describe strategies to deal with such a situation					I	R	М	M	М	М
	7	Recognize and describe the potential risks and dangers associated with various forms of online communications (email, chat rooms, social media)					ı	R	М	М	М	M
	8	Analyze and explain how media and technology can be used to distort, exaggerate, and misrepresent information							I	R	М	М
	9	Give examples of hardware and software applications that enable people with disabilities to use technology							_	R	М	М
	10	Describe the potential risks associated with the use of networked digital environments (internet, mobile, wireless networks) and sharing personal information.							1	R	М	M
I-Intro	duce	R-Reinforce M-Mastery (A	Abil	ity	to	Tea	ch	Otł	ners	s)		

Category	RG	Objective	P	K	1	2	3	4	5	6	7	8
	1	Use age-appropriate technologies to locate, collect, organize content from media collection for specific purposes			-	R	М	M	М	М	M	М
Research and	2	Perform basic searches on databases (e.g. glossary, library, encyclopedia) to locate information					Ι	R	М	М	М	М
Gathering Information (RG)	3	Evaluate teacher-selected or self-selected internet resources in terms of their usefulness for research					1	R	М	М	М	М
	4	Use Web 2.0 tools (online discussions, blogs, and wikis) to gather and share information									I	R

	5	Identify and analyze the purpose of a media message (to inform, persuade and entertain)			_	R	M	M	M	M	М	М
	6	Analyze a source to determine its authoritative validity and make a distinction between suffixes (.edu, .gov, .com, .au, .org)							Ι	R	М	M
	7	Use search engines and online directories safely and appropriately to locate relevant results			_	R	M	M	M	M	М	М
	8	Organize bookmarks and favorites for quick retrieval and easy sharing.							_	R	М	М
	9	Use refresh, forward, back, and tab browsing to navigate multiple web pages									I	R
	10	Identify and use hyperlinks within web pages or documents							Ι	R	М	М
I-Introd	luce	R-Reinforce M-Mastery (A	Abil	ity	to <sup>-</sup>	Геа	ch	Oth	ers	s)		

Category	СС	Objective	P	K	1	2	3	4	5	6	7	8
	1	Work collaboratively online with other students in class under teacher supervision					I	R	М	M	M	М
	2	Use a variety of age-appropriate technologies (e.g. drawing program, presentation software) to communicate and exchange ideas					I	R	М	M	М	М
	3	Create projects that use text and various forms of graphics, audio, and video, (with proper citations) to communicate ideas					I	R	М	M	М	М
Communication and	4	Use teacher developed guidelines to evaluate multimedia presentations for organization, content, design, presentation and appropriateness of citations					Ι	R	М	М	М	М
Collaboration (CC)	5	Use teacher approved Web 2.0 tools (email, discussion forums, blogs, etc.) for communication with peers, experts, and other audiences using appropriate academic language							-	R	М	М
	6	Plan and implement a collaborative project with students in another school or another country using telecommunication tools (email, discussion forums, translating tools, video conference, etc.)									1	R
	7	Use a course or learning management system to access class resources/schedules and complete assignments									I	R

	8	Create and maintain a digital portfolio or collection of works related to one's learning								I	R
	9	Employ effective pair programming skills of "driver" and "navigator" while coding with a variety of partners						-	R	М	M
I-Introduce R-Reinforce M-Mastery (Ability to Teach Others)											

# Assessment of the academic growth and achievement of each student

Each individual teacher uses a combination of typing programs, collaborative and individual projects, direct instruction, guided exploration, and practical application through cross-curriculum integration. Students will complete projects for other subjects to apply their knowledge of the technology concepts they are learning. The length and level of the project is dependent on both the grade level and the student being taught.

#### **Evidence of fundamental principles of student growth**

Through class discussions, activities, projects, and hands-on experience students will build on their previous knowledge as they learn new technology concepts from grade-to-grade. As students grow, they will improve their typing skills, digital literacy, and proper digital etiquette and safety.