



Technology Curriculum Guidelines

2025

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Introduction

The Diocese of Superior Technology Curriculum specifies what students are expected to know and be able to do with respect to technology in grades PreK-8 as a basis for developing skills that support learning, personal productivity, and moral decision-making in their daily life filled with prayer and daily contemplation.

Philosophy

Students attending Catholic schools in the Diocese of Superior shall be taught to utilize available and emerging technologies for education, communication, problem solving, analysis, and research in accordance with Catholic values, ethical principles, and moral decision making. Students shall have the opportunity to locate, process, and use information in order to improve their abilities to learn, communicate, reason, and work.

Technology is best learned within the context of applications, activities, projects, and problems that replicate real-life situations. The use of technology facilitates and enhances instruction of other curricula while also developing real-world skills necessary in continuing education and the work place. Technology's benefits best emerge when integrated into project-based curricular activities that further higher-level thinking skills. The following curriculum should be incorporated into classroom activities in which students are: 1) gatherers of information, 2) problem solvers, 3) communicators of knowledge, and 4) safe, moral and ethical users of technology.

Processes and Resources

The Diocese of Superior Technology Curriculum is based upon the International Society for Technology Education (ISTE) Standards (formerly known as NETS).

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Performance Indicators

A major component of a standards based technology curriculum is the development of a general set of profiles describing technology-literate students at key developmental points as they progress through their PreK - 8th grade years. These profiles reflect the underlying assumption that all students should have the opportunity to develop technology skills that support learning, personal productivity, decision making, and daily life. These profiles and associated standards provide a framework for preparing students to be lifelong learners who make informed decisions about the role of technology in their lives and in their faith. The Diocese of Superior Technology Curriculum represents essential, realistic, and attainable goals for lifelong learning and a productive citizenry.

Catholic Church Teachings

From the Catechism of the Catholic Church

2293 Basic scientific research, as well as applied research, is a significant expression of man's dominion over creation. Science and technology are precious resources when placed at the service of man and promote his integral development for the benefit of all. By themselves however they cannot disclose the meaning of existence and of human progress. Science and technology are ordered to man, from whom they take their origin and development; hence they find in the person and in his moral values both evidence of their purpose and awareness of their limits. (159, 1703)

2294 It is an illusion to claim moral neutrality in scientific research and its applications. On the other hand, guiding principles cannot be inferred from simple technical efficiency, or from the usefulness accruing to some at the expense of others or, even worse, from prevailing ideologies. Science and technology by their very nature require unconditional respect for fundamental moral criteria. They must be at the service of the human person, of his inalienable rights, of his true and integral good, in conformity with the plan and the will of God. (2375)

1723 The beatitude we are promised confronts us with decisive moral choices. It invites us to purify our hearts of bad instincts and to seek the love of God above all else. It teaches us that true happiness is not found in riches or well-being, in human fame or power, or in any human achievement—however beneficial it may be—such as science, technology, and art, or indeed in any creature, but in God alone, the source of every good and of all love: (2519, 227)

From the Pontifical Council for Social Communications – “The Church and the Internet”, 2002

www.vatican.va/roman_curia/pontifical_council/pccs/documents/rc_pc_pccs_doc_20020228_church-internet_en.html

1 The Pastoral Instruction on the Means of Social Communication *Communio et Progressio* published in 1971, underlined the point: “The Church sees these media as ‘gifts from God’ which, in accordance with his providential design, unite men in brotherhood and so help them to cooperate with his plan for their salvation.”

2 Considering the media of social communication, we see they “contribute greatly to the enlargement and enrichment of men’s minds and to the propagation and consolidation of the kingdom of God.”

3 The Church has a two-fold aim in regard to the media. One aspect is to encourage their right development and right use for the sake of human development, justice, and peace—for the upbuilding of society at the local, national, and community levels in light of the common good and in a spirit of solidarity.

5 Internet is relevant to many activities and programs of the Church— evangelization, including both re-evangelization and new evangelization and the traditional missionary work ad gentes, catechesis and other kinds of education, news and information, apologetics, governance and administration, and some forms of pastoral counseling and spiritual direction. Although the virtual reality of cyberspace cannot substitute for real interpersonal community, the incarnational reality of the sacraments and the liturgy, or the immediate and direct proclamation of the gospel, it can complement them, attract people to a fuller experience of the life of faith, and enrich the religious lives of users. It also provides the Church with a means for communicating with particular groups—young people and young adults, the elderly and home-bound, persons living in remote areas, the members of other religious bodies—who otherwise may be difficult to reach.

7 Education and training are another area of opportunity and need. “Today everybody needs some form of continuing media education, whether by personal study or participation in an organized program or both. More than just teaching about techniques, media education helps people form standards of good taste and truthful moral judgment, an aspect of conscience formation. Through her schools and formation programs the Church should provide media education of this kind”.

Education and training regarding the Internet ought to be part of comprehensive programs of media education available to members of the Church. As much as possible, pastoral planning for social communications should make provision for this training in the formation of seminarians, priests, religious, and lay pastoral personnel as well as teachers, parents, and students.

Young people in particular need to be taught “not only to be good Christians when they are recipients but also to be active in using all the aids to communication that lie within the media...So, young people will be true citizens of that age of social communications which has already begun”—an age in which media are seen to be “part of a still unfolding culture whose full implications are as yet imperfectly understood”. Teaching about the Internet and the new technology thus involves much more than teaching techniques; young people need to learn how to function well in the world of cyberspace, make discerning judgments according to sound moral criteria about what they find there, and use the new technology for their integral development and the benefit of others.

8 At a very deep level, “the world of the media can sometimes seem indifferent and even hostile to Christian faith and morality. This is partly because media culture is so deeply imbued with a typically postmodern sense that the only absolute truth is that there are no absolute truths or that, if there were, they would be inaccessible to human reason and therefore irrelevant”.

9 The virtual reality of cyberspace has some worrisome implications for religion as well as for other areas of life. Virtual reality is no substitute for the Real Presence of Christ in the Eucharist, the sacramental reality of the other sacraments, and shared worship in a flesh-and-blood human community. There are no sacraments on the Internet; and even the religious experiences possible there by the grace of God are insufficient apart from real-world interaction with other persons of faith. Here is another aspect of the Internet that calls for study and reflection. At the same time, pastoral planning should consider how to lead people from cyberspace to true community and how, through teaching and catechesis, the Internet might subsequently be used to sustain and enrich them in their Christian commitment.

10 It is important, too, that people at all levels of the Church use the Internet creatively to meet their responsibilities and help fulfill the Church's mission.

11 *To educators and catechists.* The Pastoral Instruction *Communio et Progressio* spoke of the “urgent duty” of Catholic schools to train communicators and recipients of social communications in relevant Christian principles. The same message has been repeated many times. In the age of the Internet, with its enormous outreach and impact, the need is more urgent than ever.

Catholic universities, colleges, schools, and educational programs at all levels should provide courses for various groups—“seminarians, priests, religious brothers and sisters, and lay leaders...teachers, parents, and students”—as well as more advanced training in communications technology, management, ethics, and policy issues for individuals preparing for professional media work or decision-making roles, including those who work in social communications for the Church.

To parents. For the sake of their children, as well as for their own sakes, parents must “learn and practice the skills of discerning viewers and listeners and readers, acting as models of prudent use of media in the home”. As far as the Internet is concerned, children and young people often are more familiar with it than their parents are, but parents still are seriously obliged to guide and supervise their children in its use. If this means learning more about the Internet than they have up to now, that will be all to good.

Parental supervision should include making sure that filtering technology is used in computers available to children when that is financially and technically feasible, in order to protect them as much as possible from pornography, sexual predators, and other threats. Unsupervised exposure to the Internet should not be allowed. Parents and children should dialogue together about what is seen and experienced in cyberspace; sharing with other families who have the same values and concerns will also be helpful. The fundamental parental duty here is to help children become discriminating, responsible Internet users and not addicts of the Internet, neglecting contact with their peers and with nature itself.

To children and young people. The Internet is a door opening on a glamorous and exciting world with a powerful formative influence; but not everything on the other side of the door is safe and wholesome and true. “Children and young people should be open to formation regarding media, resisting the easy path of uncritical passivity, peer pressure, and commercial exploitation”. The young owe it to themselves—and to their parents and families and friends, their pastors and teachers, and ultimately to God—to use the Internet well.

The Internet places in the grasp of young people at an unusually early age an immense capacity for doing good and doing harm, to themselves and others. It can enrich their lives beyond the dreams of earlier generations and empower them to enrich others' lives in turn. It also can plunge them into consumerism, pornographic and violent fantasy, and pathological isolation.

Young people, as has often been said, are the future of society and the Church. Good use of the Internet can help prepare them for their responsibilities in both. But this will not happen automatically. The Internet is not merely a medium of entertainment and consumer gratification. It is a tool for accomplishing useful work, and the young must learn to see it and use it as such. In cyberspace, at least as much as anywhere else, they may be called on to go against the tide, practice counter-culturalism, even suffer persecution for the sake of what is true and good.

12 *To all persons of good will.* Finally, then, we would suggest some virtues that need to be cultivated by everyone who wants to make good use of the Internet; their exercise should be based upon and guided by a realistic appraisal of its contents.

Prudence is necessary in order clearly to see the implications—the potential for good and evil—in this new medium and to respond creatively to its challenges and opportunities.

Justice is needed, especially justice in working to close the digital divide—the gap between the information-rich and the information-poor in today's world. This requires a commitment to the international common good, no less than the “globalization of solidarity”.

Fortitude, courage, is necessary. This means standing up for truth in the face of religious and moral relativism, for altruism and generosity in the face of individualistic consumerism, for decency in the face of sensuality and sin.

And temperance is needed—a self-disciplined approach to this remarkable technological instrument, the Internet, so as to use it wisely and only for good.

Saints of Technology

Saint Isadore of Seville – Patron Saint of the Internet and Technology - Feast Day: April 4



St. Isadore is a Doctor of the church and the last of the Latin Fathers. In the 1990s, Catholics looked for their own patron of the forming internet world. In January 2000, the [Order of St. Isidore of Seville](https://www.wordonfire.org/articles/the-patron-saint-of-the-internet/) was formed to celebrate the beginning of the third millennium, to honor Isadore as the patron saint of the internet, and to promote the ideals of Christian valor online. (Becklo, Matthew, *The Patron Saint of the Internet*, Word on Fire, <https://www.wordonfire.org/articles/the-patron-saint-of-the-internet/>, October 9, 2024)

St. Isadore was born at Cartagena in Spain. His brothers St. Leander and St. Fulgentius, both Bishops, and his sister Florentina are numbers among the Saints. St. Isadore composed the earliest encyclopedias on record known as *Etymologiae*. These writings were used as textbooks for nine centuries.

Almighty and eternal God, who created us in Your image and asked us to seek after all that is good, true and beautiful, especially in the divine person of Your only-begotten Son, our Lord Jesus Christ, Grant we beseech You that through the intercession of Saint Isidore, bishop and doctor, during our journeys through the internet, we will direct our hands and eyes only to that which is pleasing to You, and treat with charity and patience all those souls whom we encounter Through Christ our Lord, Amen.

Saint Carlo Acutis – the First Millennial Saint

Carlo Acutis was born in London on May 3, 1991. While in a Jesuit school, he showed skills in information technology, computers and the internet. He was inspired by Steve Jobs, former CEO of Apple. The wisdom Jobs shared struck a chord with the young Carlo: “Your time is limited, so don’t waste it living the life of someone else.” For Carlo, this highest good of all was God and his will for his life. “Happiness is looking towards God,” he said. “Sadness is looking towards yourself.” One of his best-known pieces of wisdom says it all: “God and not me.” Carlo is a great example of someone who used modern technology to good effect without wasting time or being distracted. In 2004, Carlo used his skills to update and develop the websites and communication platforms of his parish and school, opening up new ways to evangelize and share the Good News using new media.



Another distinct feature of Carlo’s young life was his love for the Eucharist. At a time when many of his contemporaries were walking away from the Mass, Carlo found something beautiful in it that attracted him, something divine that he experienced. He famously said, “The Eucharist is my motorway to heaven,” and that “with each Communion we come closer to the goal of sanctity.”

Carlo was declared a blessed of the Church on October 10, 2020. He was canonized on April 27, 2025 at the Jubilee of Adolescents in Rome.

(Swan, Billy, *Carlo Acutis, the First Millennial Saint*, Word on Fire, <https://www.wordonfire.org/articles/carlo-acutis-the-first-millennial-saint/>, October 9, 2024)

A. BASIC OPERATIONS AND CONCEPTS

	Grades K-2	Grades 3-5	Grades 6-8
A.1	Use input devices (e.g., mouse and keyboard) and output devices (e.g., monitor, printer) to successfully operate computers, simple audio and visual equipment and other basic technologies.		
	Turn the computer on and log in. Use a pointing device such as a mouse to manipulate shapes, click on URLs, radio buttons, check boxes, use scroll bar	Explain and use age-appropriate online tools and resources	
A.2	Use a variety of media and technology resources for directed independent learning activities. (e.g., recording devices, tablets, computers, etc.)		
	Explore a variety of digital tools and select a tool that will support learning with educator guidance.	Explore and select appropriate digital tools based on the necessary concepts of technology operations, including troubleshooting with educator support.	Navigate a variety of digital tools to choose, use, and troubleshoot technologies to create new knowledge.
A.3	Use developmentally appropriate multimedia resources (e.g., interactive books, educational software and websites) to support learning. Communicate about technology using developmentally appropriate and accurate terminology.		
	Identify and explore digital tools that can be used to support personalized learning environment with educator guidance.	Explore and select digital tools to customize personalized learning environments with educator support.	Manage digital tools to customize learning by making adjustments to their personalized learning environments to maximize the learning process.
A.4	Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (e.g., close out of programs, restart programs, reboot device, etc.)		
	Recognize the patterns in the fundamental operations across a variety of digital tools.	Transfer learning between digital tools and learning environments.	Understand the fundamental concepts of technology operations and demonstrate the ability to choose, use, and troubleshoot current technologies.
A.5	Apply keyboarding skills and practice.		
	Locate and use letter and number keys with left- and right-hand placement.	Locate and use correct finger/hand for spacebar, enter, and shift key. Gain proficiency and speed in keyboarding.	Demonstrate automaticity in keyboarding skills by increasing accuracy and speed

B. DIGITAL CITIZENSHIP

	Grades K-2	Grades 3-5	Grades 6-8
B.1	Work cooperatively and collaboratively with peers, family members, and when using technology in the classroom.		
	Learn a variety of roles within a team to cooperate.	Explore and participate in a variety of roles within a team using age-appropriate digital tools to complete a project or solve a problem.	Contribute and commit to team goals and determine role on the team based on knowledge of digital tools and content, as well as personal preference.
B.2	Demonstrate positive social & ethical behaviors when using technology. (e.g., no cyber-bullying, using copy written materials responsibly, not posting personal information, etc.)		
	Identify information that should not be shared online because it is private and personal.	Recognize how information put online creates a digital footprint and can leave a “trail” online (digital footprint).	Demonstrate safe digital actions and understand information shared digitally is public and can be searched, copied, and potentially seen by public audiences.
B.3	Discuss and practice basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. (e.g., acceptable use policy)		
	Identify guidelines for acceptable use of internet and other resources.	Recognize differences among content consumption, creation, and remixing.	Demonstrate safe digital actions and understand information shared digitally is public and can be searched, copied, and potentially seen by public audiences.
B.4	Demonstrate knowledge of current changes in information technologies and the effect those changes have on students, schools, community and society. (e.g., rise of social media, etc.)		
	Demonstrate respect in social situations.	Identify and create positive and constructive feedback.	Discuss the impact that negative comments can have on both their targets and their viewers.
B.5	Understand the impact technology has on our everyday lives and the effects of computing on the economy and culture.		
	Compare and contrast examples of how computing technology has changed the way people live, work, and interact.	Discuss computing technologies that have changed the world and express how those technologies influence, and are influenced by, cultural practices.	Provide examples of how computational artifacts and devices impact health and wellbeing, both positively and negatively. Explain how computer science fosters innovation and can enhance careers and disciplines.
B.6	Exhibit legal, ethical and moral behaviors when using information and technology, and discuss consequences of misuse.		
		Explain and apply the concept of intellectual property rights and how copyrights protect authors and producers.	Demonstrate and advocate for an understanding of intellectual property with both print and digital media-including copyright, permission and fair use-by creating a variety of media products that include appropriate citation and attribution elements.
B.7	Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias (reliability) of electronic information sources concerning real-world problems.		
			Practice and demonstrate the ability to evaluate resources for accuracy, perspective, credibility, and relevance while distinguishing between fact and opinion in the research.

C. TECHNOLOGY TOOLS - KNOWLEDGE CONSTRUCTOR

	Grades K-2	Grades 3-5	Grades 6-8
C.1	Use technology tools for individual and collaborative writing, communication, and publishing activities to create products and complete assignments.		
	Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (i.e., slide presentations)	Design, develop, publish, and present products (i.e. slide presentations, digital videos) using technology resources that demonstrate and communicate curriculum concepts.	Use a variety of media to present information for specific purposes (i.e. reports, research papers, presentations, podcasts, etc.) Publish and present content that will effectively convey ideas to an authentic audience.
C.2	Use technology resources for problem solving, communication and illustration of thoughts, ideas, and stories. Students communicate complex ideas clearly using various digital tools to convey the concepts textually, visually, graphically, etc.		
	Explore a variety of educator-selected resources, and with assistance, create an artifact that demonstrates connections to their learning.	Explore, select, and utilize sources of curated information to produce creative artifacts to make meaningful learning experiences.	Explore, select, and utilize multiple sources of curated information to produce creative artifacts for multiple audiences demonstrating meaningful connections or conclusions
C.3	Gather information and communicate with others using telecommunications, with support from teachers, family members, or student partners.		
	Explore a variety of educator-selected, curated content tools to acquire and organize information.	Organize information from a variety of educator selected, curated content and make meaningful, thematic connections between resources.	Locate and collect resources from a variety of sources and organize assets into curated collections for a wide range of audiences, projects, and purposes.
C.4	Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning.		
	Communicate ideas using a variety of digital tools with educator guidance.	Create digital artifacts to communicate ideas clearly.	Communicate complex ideas clearly using various digital tools to an authentic audience.
C.5	Collaborate with peers and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions.		
		Explore and participate in a variety of roles within a team using age-appropriate digital tools to complete a project or solve a problem.	Explore and participate in a variety of roles within a team using age-appropriate digital tools to complete a project or solve a problem.
C.6	Plan and employ effective research strategies.		
	Utilize knowledge of the alphabet to search; use basic keyword search techniques to locate information.	Explore and use different keyword searches such as using multiple words, synonyms, and alternative words and phrases;	Demonstrate and practice a variety of search strategies for effective and efficient online searches.
C.7	Develop algorithms. Create procedures with parameters to organize code and make it easier to reuse.		
	Construct, decompose and execute algorithms (sets of step-by-step instructions), which include sequencing and simple loops to accomplish a task, both independently and collaboratively, with or without a computing device.	Construct programs to solve a problem or for creative expression, which include sequencing, events, loops, conditionals, and variables, using a block-based visual programming language, both independently and collaboratively (e.g., pair programming).	Develop programs, both independently and collaboratively, which include sequencing with nested loops and multiple branches using block-based and/or textbased languages.

DIGITAL CITIZENSHIP

Common Sense Education https://www.commonsense.org/education/digital-citizenship/curriculum	
Media Balance & Well Being	Students go beyond screen time to explore the impact their digital lives can have on their well-being and relationships while learning to balance media in their everyday lives.
Privacy & Security	Students learn how to protect personal information and gain a deeper understanding of their data privacy rights so they can advocate for themselves and others.
Digital Footprint & Identity	Students consider the benefits and risks of online sharing and explore how a digital persona can affect one's sense of self, reputation, and relationships.
Relationships & Communication	Students reflect on how to build positive relationships, avoid risky online talk, and understand why some topics and conversations can best lend themselves to certain mediums.
Cyberbullying, Digital Drama & Hate Speech	Students take on these tough topics and play the active role of upstander to build positive, supportive online communities and combat online cruelty.
News & Media Literacy	Students identify credible and trustworthy information sources and reflect on their responsibilities as thoughtful media creators and consumers.

Institute for Catholic Education https://iceont.ca/resources/ocsge/digital-citizenship/	
#DiscerningBeliever	<ul style="list-style-type: none"> • I believe that God is always with me – even in my online activity • I witness online to my experience of God's love expressed to me in Jesus Christ. • I rely on the Holy Spirit's guidance and conduct myself online as a Joyful Disciple. • I believe in forgiveness and am forgiving and never vengeful online.
#Effective Communicator	<ul style="list-style-type: none"> • I communicate clearly, honestly, and with sensitivity while online. • I use my voice online to speak up for others and show I care about them. • I choose words that are life-giving when commenting or posting online. • I work to ensure that I can be proud of my online voice and digital reputation.
#ReflectiveCreative HolisticThinker	<ul style="list-style-type: none"> • I share my ideas in a respectful way. • I approach conflict online with knowledge, understanding and prayer. • I make wise choices and informed decisions when navigating online. • I use the internet to advocate for kindness, humility, love and hope in the world.
#SelfDirected ResponsibleLifeLong Learner	<ul style="list-style-type: none"> • I set goals and continually work to improve myself as a digital citizen. • I reflect on the digital footprint that my online activity creates. • I exercise Christian leadership online to set a positive example for others • I maintain a healthy balance between my online and offline activities.
#Collaborative Contributor	<ul style="list-style-type: none"> • I collaborate with others online. • I value everyone's work and use others' digitized media ethically. • I use my God-given gifts and talents when contributing online. • I use the online forum to build on my strengths and for the benefit of others.
#CaringFamilyMembers	<ul style="list-style-type: none"> • I treat all people online with respect as we are all created in God's image. • I represent myself well during my online interactions. • I recognize how my online activities affect my family and my school community. • I show care and respect for God's creation and everything in it.
#ResponsibleCitizen	<ul style="list-style-type: none"> • I am a peacemaker in the digital world. • I stand up for what is right even when it's not popular. • I witness to the fact that all life is precious. • I advocate for a just and compassionate society.

Ten Commandments

1. I am the LORD your God; you shall not have strange gods before me.
2. You shall not take the name of the Lord your God in vain.
3. Remember to keep holy the Lord's day.
4. Honor your father and your mother.
5. You shall not kill.
6. You shall not commit adultery.
7. You shall not steal.
8. You shall not bear false witness against your neighbor.
9. You shall not covet your neighbor's wife.
10. You shall not covet your neighbor's goods.

Digital Citizenship

1. Do not put anyone or anything before God; media balance
2. Show respect/reverence to God in your when speaking & writing digitally; think before you post
3. Media balance
4. Respect and obey family and school rules for technology use
5. Cyberbullying; causing deliberate harm to someone with unkind words/posts on social media.
6. Modesty/chastity: inappropriate sites, Reputation & sexting
7. Creating online content using others work: seek appropriate permission & give credit
8. Be truthful; power of words on social media: gossiping/spreading rumors
- 9 & 10. Jealousy/greed can breed through social media: Snapchat/Instagram selfies: understand that people post the good, not always reality.
Be grateful for all that you have.

<https://www.catechist.com/digital-citizenship-equipping-future-saints/> (4/11/2025)