HOLY NAME SCHOOL
COMPUTER/TECHNOLOGY CURRICULUM BENCHMARKS

Holy Name School integrates the Michigan Educational Technology Standards and the National Educational Technology Standards into the curriculum of all subjects to improve student academic achievement. Students K through 8 use technology in the classroom as well as attend computer classes.

Grades K-2

- Basic operations and concepts
  - Students will use input and output devices to successfully operate computers and other technologies
    - Log in, start a program, interact using mouse and keyboard, print, save, shut down.
    - Basic mouse and keyboarding skills.
    - Use a television, VCR, DVD and CD player.
  - Students will communicate about technology using developmentally appropriate and accurate terminology
    - Accurately recognize, name and identify computer components and their functions.
    - Discuss basic care of computer hardware.
  - Students will use developmentally appropriate multimedia resources for directed and independent learning activities to support learning.
    - Educational software (Reader Rabbit, JumpStart, Letterbugs)
    - Interactive books in classrooms
    - Use a variety of age-appropriate technologies for sharing information
- Social, ethical, and human issues
  - Students will demonstrate positive social and ethical behaviors when using technology
    - Work cooperatively and collaboratively with peers
    - Share computer time and equipment with peers in classrooms.
    - Respect the files and documents of their peers.
    - Discuss advantages and disadvantages of using technology.
    - Discuss the consequences of irresponsible uses of technology resources at home or at school.
  - Students will practice responsible use of technology systems and software.
    - Proper care of computer, peripherals, and software.
    - Understand that technology is a tool to help complete a task and a source of information, learning, and entertainment.
- Technology productivity, communication, and problem-solving tools
  - Students will create developmentally appropriate multimedia products with support from teachers
    - Create basic slideshow demonstrating and an understanding for reading/language arts, social studies and/or science using KidPix
  - Students will know how to use age-appropriate media to communicate ideas to classmates, families, and others.
    - Create pictures or stories using drawing and word processing programs.
  - Students will use technology resources for problem solving, communication, and illustration of thought, ideas, and stories.
    - Writing and drawing tools to express ideas, organize thoughts, and/or communicate.
    - Identifying ways that technology has been used to address real-world problems.

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Grades 3-5

- Basic operations and concepts
  - Students will use keyboards and other common input and output devices efficiently and effectively.
    - Know how to use proper keyboarding positions and touch-typing techniques.
    - Can manage and maintain files on a hard drive/ network.
    - Demonstrate proper care in the use of hardware, software, peripherals, and storage media, such as DVD, VCR, CD ROM, etc.
    - Know how to import pictures into documents and save changes.
    - Can proofread and edit using proper resources.
  - Students will discuss common uses of technology in daily life and the advantages and disadvantages those uses provide.
    - Discuss ways technology has changed life at school, at home, in business and government.
    - Recognize and discuss computer security needs to help protect information and keep the system functioning properly.
    - Identify search strategies for locating needed information on the internet.
- Social, ethical, and human issues
  - Students will discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.
    - Discuss the accuracy, relevance, appropriateness, and bias of online information.
    - Discuss and describe consequences of inappropriate use of computers, digital cameras, cell phones, PDA's etc.
    - Discuss basic issues regarding appropriate and inappropriate uses of technology & describe consequences related to inappropriate use.
    - Internet safety – identify safety precautions that should be taken while on-line
- Technology productivity tools
  - Students will use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum.
    - Know how to use menu options in word processing, spreadsheet, and presentation software to print, format, add multimedia features, open, save, manage files, and use grammar tools
    - Know how to insert various objects into word processing documents and presentations.
    - Use a variety of technology tools and applications to promote creativity
  - Students will use technology tools such as presentation software, Web tools, & scanners for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.
    - Use a variety of technology tools and applications to promote creativity
    - Collaborate with classmates using a variety of technology tools to plan, organize, and create a group project.
- Technology communication tools
  - Students will use telecommunications and online resources to participate in collaborative activities for the purpose of developing solutions or products for audiences inside and outside the classroom
    - Use a variety of media and formats to create and edit products such as brochures, newsletters, & presentations to communicate information and ideas to various audiences.
    - Identify how different forms of media and formats may be used to share similar information, depending on the intended audience such as a presentation of classmates or a brochure for parents.

- Technology research tools
    - Students will use technology resources (calculators, videos, educational software) for problem solving, self-directed learning, and extended learning activities.
        - Compare and contrast the functions and capabilities of the word processor, database, and spreadsheet for gathering data, processing data, performing calculations, and reporting results.
        - Use Web search engines and World Book online to locate information.
        - Describe basic guidelines for determining the validity of information accessed from various sources such as web site, dictionaries, on-line newspapers, CD-ROM, etc.
        - Evaluate technology resources for accuracy, appropriateness, and bias.
        - Know how to independently use existing databases such as the library catalog and encyclopedias to locate, sort, and interpret information on an assigned topic.
- Technology problem-solving and decision-making tools
    - Students will determine which technology is useful and select the appropriate tools and technology resources to address a variety a tasks and problems.
        - Create a simple spreadsheet to organize data and information from a class investigation or activity.
        - Use information and communication technology tools to collect, organize and evaluate information to assist with real-life problems.
    - Students will evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.
        - Use web-site evaluation checklist
        - Use technology resources to access information that can assist in making informed decisions about everyday matters.

Grade 6-8

- Basic operations and concepts
    - Students will apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.
        - Discuss common hardware and software difficulties for trouble-shooting and problem solving (logging problems, virus scanning, identifying problems, troubleshooting)
        - Identify characteristics that suggest that the computer system hardware or software might need to be upgraded.
    - Students will demonstrate an understanding of concepts underlying hardware, software, and connectivity
        - Use appropriate technology terminology
        - Use a variety of technology tools to maximize the accuracy of the technology-produced products.
        - Understand that new technology tools can be developed to do what could not be done without the use of technology
        - Identify a variety of information storage devices (floppies, CDs, DVDs, flash, drives, tapes) and provide rationale for using a certain device for a specific purpose
        - Proofread and edit writing using appropriate resources
    - Students will use sophisticated input-output devices efficiently and effectively.
        - Use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer.
- Social, ethical, and human issues
    - Students will demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.
        - Discuss the societal impact of technology in the future
        - Use technology to identify and explore various occupations or careers

        - Discuss possible uses of technology (present and future) to support personal pursuits and lifelong learning.
    - Students will exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.
        - Discuss issues related to acceptable and responsible use of technology (privacy, security, copyright, plagiarism, spam, virus, pirating)
        - Describe possible consequences and costs related to unethical use of information and communication technologies.
        - Understand the potential risks and dangers associated with on-line communications.
- Technology productivity tools
    - Students will use content-specific tools, software, and simulations to support learning and research.
        - Apply common software features such as charts, graphics, and sounds to enhance communication and to support creativity.
        - Use a variety of technology resources, including the internet, to increase learning and productivity.
    - Students will apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.
        - Explore basic applications that promote creativity such as photo-editing, presentation, and graphics.
        - Use available utilities for editing pictures, images, or charts.
        - Use collaborative tools to design, develop, and enhance material, publications, or presentations.
- Technology communications tools
    - Students will design, develop, publish, and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.
        - Create a project such as presentation, web page, information brochure, etc. using a variety of media and formats to present content information to an audience.
- Technology research tools
    - Students will collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.
        - Use a variety of Web search engines to locate information.
        - Identify types of internet sites based on their domain names (.edu, .com, .org, etc.)
        - Evaluate Web sites for accuracy, bias, appropriateness, and comprehensiveness.
    - Students will select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.
        - Know how to create and populate a database.
        - Perform queries on existing databases.
        - Know how to create and modify a simple database report.
        - Evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task.
- Technology problem-solving and decision-making tools
    - Students will demonstrate an understanding of concepts underlying hardware, software, and connectivity and of practical applications to learning and problem solving.
        - Use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist with solving a basic problem.
    - Students will research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

- Describe the information and communication technology tools to use for collecting information from different sources, analyze findings, and draw conclusions for addressing real-world problems.

Section 5 – Student Achievement
The goal of the technology curriculum is for students to acquire a lifelong knowledge and skills for the 21st century.

Kindergarten through Grade 2

Students learn basic computer skills, using METS and NETS standards, while completing projects integrated in the schools' reading, math, social studies and science curriculums.
Programs that are utilized are

KidPix Deluxe – used in all subjects as response to learning; Slideshow presentation
Easy Book Deluxe – Story Writing
Student Writing Center – Story Writing
PrintShop – Presentation projects such as booklets, cards, newsletters, and signs.
Microsoft Word and Excel – Introduced
Basic Math – Math facts practice
Letterbugs – phonemic awareness skills
Reader Rabbit – Reading skills

Grades 3 through 5

Students work in depth with Microsoft Word and Excel. They are introduced to PowerPoint as well. All projects are also integrated with the Holy Name School curriculum, as well as METS and NETS standards. Keyboarding is also introduced and practiced using the Type to Learn program. Other programs also used are:

Easy Book Deluxe – Story Writing
PrintShop/ –Brochures/ Newsletters
Basic Math – Math facts practice

Grades 6 through 8

Students continue working with Microsoft Office programs including Access and Publisher. Research skills and Internet safety are added to the curriculum. Students also continue to practice their typing skills with Mavis Beacon Teaches Typing.

Other programs that are used are Accelerated Reader and World Book Online.