Michigan Educational Technology Standards for Students (METS-S) 2009 – PK-12 Alignment with NETS 2007 and the 21st Century Framework

Grades Three through Five – Technology Standards and Expectations – (prior to completing Grade 5)

3-5.CI. Creativity and Innovation - By the end of Grade 5 each student will:	NETS 2007	21st Century
1. produce a media-rich digital project aligned to state curriculum standards (e.g., fable, folk tale, mystery, tall tale, historical fiction)	1. Creativity/Innov. 3. Res./Info. Lit. 6. Oper./Concepts	C S, 21st Cent. I, M, T Skills
2. use a variety of technology tools and applications to demonstrate his/her creativity by creating or modifying works of art, music, movies, or presentations	1. Creativity/Innov. 6. Oper./Concepts	C S, 21st Cent. I, M, T Skills
3. participate in discussions about technologies (past, present, and future) to understand these technologies are the result of human creativity	1. Creativity/Innov. 2. Comm./Collab.	L, I Skills
3-5.CC. Communication and Collaboration - By the end of Grade 5 each student will:	**NETS 2007**	**21st Century**
1. use digital communication tools (e.g., e-mail, wikis, blogs, IM, chat rooms, videoconferencing, Moodle, Blackboard) and online resources for group learning projects	2. Comm./Collab. 6. Oper./Concepts	L, I Skills I, M, T Skills
2. identify how different software applications may be used to share similar information, based on the intended audience (e.g., presentations for classmates, newsletters for parents)	2. Comm./Collab. 6. Oper./Concepts	L, I Skills I, M, T Skills
3. use a variety of media and formats to create and edit products (e.g., presentations, newsletters, brochures, web pages) to communicate information and ideas to various audiences	2. Comm./Collab. 6. Oper./Concepts	L, I Skills I, M, T Skills
3-5.RI. Research and Information Fluency - By the end of Grade 5 each student will:	**NETS 2007**	**21st Century**
1. identify search strategies for locating information with support from teachers or school library media specialists	3. Res./Info. Lit.	L, C Skills I, M, T Skills
2. use digital tools to find, organize, analyze, synthesize, and evaluate information	3. Res./Info. Lit. 6. Oper./Concepts	L, C Skills I, M, T Skills
3. understand and discuss that web sites and digital resources may contain inaccurate or biased information	3. Res./Info. Lit. 6. Oper./Concepts	L, C Skills I, M, T Skills
4. understand that using information from a single Internet source might result in the reporting of erroneous facts and that multiple sources should always be researched	3. Res./Info. Lit. 6. Oper./Concepts	L, C Skills I, M, T Skills

3-5.CT. Critical Thinking, Problem Solving, and Decision Making - By the end of Grade 5 each student will:	**NETS 2007**	**21st Century**
1. use digital resources to access information that can assist in making informed decisions about everyday matters (e.g., which movie to see, which product to purchase)	4. CT, PS, DM 6. Oper./Concepts	L, I Skills I, M, T Skills
2. use information and communication technology tools (e.g., calculators, probes, videos, DVDs, educational software) to collect, organize, and evaluate information to assist with solving problems	4. CT, PS, DM 6. Oper./Concepts	L, I Skills I, M, T Skills
3. use digital resources to identify and investigate a state, national, or global issue (e.g., global warming, economy, environment)	4. CT, PS, DM 6. Oper./Concepts	L, I Skills I, M, T Skills
3-5.DC. Digital Citizenship - By the end of Grade 5 each student will:	**NETS 2007**	**21st Century**
1. discuss scenarios involving acceptable and unacceptable uses of technology (e.g., file-sharing, social networking, text messaging, cyber bullying, plagiarism)	5. Digital Citizens.	I, M, T Skills
2. recognize issues involving ethical use of information (e.g., copyright adherence, source citation)	5. Digital Citizens.	L, C Skills I, M, T Skills
3. describe precautions surrounding personal safety that should be taken when online	5. Digital Citizens. Internet Safety	I, M, T Skills
4. identify the types of personal information that should not be given out on the Internet (name, address, phone number, picture, school name)	5. Digital Citizens. Internet Safety	I, M, T Skills
3-5.TC. Technology Operations and Concepts - By the end of Grade 5 each student will:	**NETS 2007**	**21st Century**
1. use basic input and output devices (e.g., printers, scanners, digital cameras, video recorders, projectors)	6. Oper./Concepts	I, M, T Skills
2. describe ways technology has changed life at school and at home	6. Oper./Concepts	L, C Skills I, M, T Skills
3. understand and discuss how assistive technologies can benefit all individuals	6. Oper./Concepts	L, C Skills I, M, T Skills
4. demonstrate proper care in the use of computer hardware, software, peripherals, and storage media	6. Oper./Concepts	I, M, T Skills
5. know how to exchange files with other students using technology (e.g., network file sharing, flash drives)	6. Oper./Concepts	I, M, T Skills

NETS 2007:	Framework for 21st Century Learning:
1. Creativity and Innovation (*Creativity/Innov*)	1. Core Subjects and 21st Century Themes (*C S, 21st Cent.*)
2. Communication and Collaboration (*Comm. / Collab.*)	2. Learning and Innovation Skills (*L, I Skills*)
3. Research and Information Literacy (*Res. / Info. Lit.*)	3. Information, Media, and Technology Skills (*I, M, T Skills*)
4. Critical Thinking, Problem Solving, and Decision Making (*CT, PS, DM*)	4. Life and Career Skills (*L, C Skills*)
5. Digital Citizenship (*Digital Citizens.*)	
6. Technology Operations and Concepts (*Oper. / Concepts*)	

Web Resources:

Each of the ISTE resources are © 2007 International Society for Technology in Education.
ISTE NETS for Students 2007
ISTE NETS for Students 2007 – Profiles for Technology (ICT) Literate Students
ISTE NETS for Students 2007 – Essential Conditions

All of the following resources are © 2004 Partnership for 21st Century Skills.
Framework for 21st Century Learning – The Partnership for 21st Century Skills has developed a vision for 21st century student success in the new global economy.
21st Century Standards
21st Century Assessment
21st Century Curriculum & Instruction
21st Century Professional Development
21st Century Learning Environments