

ITcenter21: Introduction to Computers and IT Correlation to: *Michigan – Educational Technology Standards*

Instructional Content Areas (Units)

IT Introduction Unit

Computer Research

Multimedia Presentations

Telecommunications and Ethics

IT In Our Lives

Information Management and Evaluation

Desktop Publishing

IT History

Word Processing

Basic Computer Functions

Computer Graphics

IT Careers

Spreadsheets

Troubleshooting and Maintenance

Databases

Web Publishing

Resource Unit



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Overview

This document demonstrates a correlation between the ITcenter21: Introduction to Computers and IT (IT21: Intro) curriculum and the Michigan *Educational Technology Standards (METS)*. The IT21: Intro curriculum provides a hands-on learning experience using real-world problems to assist certification candidates in preparing for the exam. The IT21: Intro units are listed across the top row of the correlation chart. The checkmarks in the second column indicate that the standard is supported the course. The X's marked in the remaining columns provide information on specific curriculum units and the standards they support.

Source for standards listed on the following pages:

Michigan Department of Education. *Educational Technology Standards (METS)*. June 2005. <<http://www.techplan.org/METS2005Checklist.doc>>.

Michigan Educational Technology Standards (METS)	ITcenter21 Course	IT Introduction Unit	Computer Research	Multimedia Presentations	Telecommun. & Ethics	IT In Our Lives	Info. Mgmt & Evaluation	Desktop Publishing	IT History	Word processing	Basic Comp. Func.	Computer Graphics	IT Careers	Spreadsheets	Troubleshooting	Databases	Web Publishing	Resource Unit
1. Basic Operations and Concepts.																		
a. Students demonstrate a sound understanding of the nature and operation of technology systems.																		
1. Students understand that new technology tools can be developed to do what could not be done without the use of technology.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Students describe strategies for identifying, and preventing routine hardware and software problems that may occur during everyday technology use.	✓														X			
3. Students identify changes in hardware and software systems over time and discuss how these changes affected various groups (e.g., individual users, education, government, and businesses).	✓	X			X				X	X				X		X		
4. Students discuss common hardware and software difficulties and identify strategies for trouble-shooting and problem solving.	✓														X			
5. Students identify characteristics that suggest that the computer system hardware or software might need to be upgraded.																		
b. Students are proficient in the use of technology.																		
1. Students use proper keyboarding posture, finger positions, and touch-typing techniques to improve accuracy, speed, and general efficiency in operating a computer.																		
2. Students use accurate technology terminology.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Students use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of technology-produced products.	✓			X				X		X		X	X				X	
4. Students identify a variety of information storage devices (e.g., floppies, CDs, DVDs, flash drives, tapes) and provide a rationale for using a certain device for a specific purpose.	✓										X							

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5. Students identify technology resources that assist with various consumer related activities (e.g., budgets, purchases, banking transactions, product descriptions).	✓		X				X											
6. Students can identify appropriate file formats for a variety of applications.	✓							X		X		X					X	
7. Students can use basic utility programs or built-in application functions to convert file formats.																		
8. Students proofread and edit writing using appropriate resources (e.g., dictionary, spell check, grammar check, grammar references, writing references) and grade level appropriate checklists both individually and in groups.	✓			X		X		X	X	X		X	X				X	
2. Social, ethical, and human issues.																		
a. Students understand the ethical, cultural, and societal issues related to technology.																		
1. Students understand the potential risks and dangers associated with on-line communications.	✓			X														
2. Students identify security issues related to e-commerce.	✓			X														
3. Students describe possible consequences and costs related to unethical use of information and communication technologies.	✓			X														
4. Students discuss the societal impact of technology in the future.	✓				X								X					
b. Students practice responsible use of technology systems, information, and software.																		
1. Students provide accurate citations when referencing information from outside sources in electronic reports.	✓		X															
2. Students discuss issues related to acceptable and responsible use of technology (e.g., privacy, security, copyright, plagiarism, spam, viruses, file-sharing).	✓		X															

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c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.																		
1. Students use technology to identify and explore various occupations or careers.	✓											X						
2. Students discuss uses of technology (present and future) to support personal pursuits and lifelong learning.	✓				X													
3. Students identify uses of technology to support communication with peers, family, or school personnel.	✓			X												X		
3. Technology productivity tools.																		
a. Students use technology tools to enhance learning, increase productivity, and promote creativity.																		
1. Students apply common software features (e.g., thesaurus, formulas, charts, graphics, sounds) to enhance communication and to support creativity.	✓			X	X		X	X	X	X	X	X	X	X	X	X	X	
2. Students use a variety of resources, including the internet, to increase learning and productivity.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Students explore basic applications that promote creativity (e.g., graphics, presentation, photo-editing, programming, video-editing).	✓			X			X					X					X	X
4. Students use available utilities for editing pictures, images, or charts.	✓										X							
b. Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.																		
1. Students use collaborative tools to design, develop, and enhance materials, publications, or presentations.	✓								X									

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4. Technology communications tools																		
a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.																		
1. Students use a variety of telecommunication tools (e.g., e-mail, discussion groups, IM, chat rooms, blogs, video-conferences, web conferences) or other online resources to collaborate interactively with peers, experts, and other audiences.																		
b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.																		
1. Students create a project (e.g., presentation, web page, newsletter, information brochure) using a variety of media and formats (e.g., graphs, charts, audio, graphics, video) to present content information to an audience.	✓			X	X			X	X			X	X				X	
5. Technology research tools																		
a. Students use technology to locate, evaluate, and collect information from a variety of sources.																		
1. Students use a variety of Web search engines to locate information.	✓		X				X											
2. Students evaluate information from various online resources for accuracy, bias, appropriateness, and comprehensiveness.	✓						X											
3. Students can identify types of internet sites based on their domain names (e.g., edu, com, org, gov, au).	✓		X															
b. Students use technology tools to process data and report results.																		
1. Students know how to create and populate a database.	✓																X	
2. Students can perform queries on existing databases.	✓																X	
3. Students know how to create and modify a simple database report.	✓																X	

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c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.																		
1. Students evaluate new technology tools and resources and determine the most appropriate tool to use for accomplishing a specific task.	✓					X												
6. Technology problem-solving and decision-making tools																		
a. Students use technology resources for solving problems and making informed decisions.																		
1. Students use database or spreadsheet information to make predictions, develop strategies, and evaluate decisions to assist them with solving a basic problem.	✓												X					
b. Students employ technology in the development of strategies for solving problems in the real world.																		
1. Students describe the information and communication technology tools to use for collecting information from different sources, analyze their findings, and draw conclusions for addressing real-world problems.	✓					X			X									