

# Michigan Merit Curriculum

## Online Experience Guideline

### Companion Document

The Michigan Merit Curriculum's Online Learning Experience Guideline document ([http://www.michigan.gov/documents/mde/Online10.06\\_final\\_175750\\_7.pdf](http://www.michigan.gov/documents/mde/Online10.06_final_175750_7.pdf)) identifies the three manners in which a student in middle school through high school can have a meaningful online learning experience. From the guidelines we see that online learning is defined as "a structured learning activity that utilizes technology with intranet/Internet-based tools and resources as the delivery method for instruction, research, assessment, and communication." The three manners in which a student can have an online learning experience are:

1. Online Courses
2. Online Learning Experiences
3. Online Learning Incorporated into Each of the Required Credits

The purpose of this companion document is to give greater detail to the manners in which a student can have a successful online learning experience. This document is intended to provide guidance to the components that should be included in an online learning experience as well as concrete examples that a teacher could implement in their lessons today.

The expectations of an online course are clearly outlined in the guideline document. While all delivery formats from self-paced to teacher-led are described, it is clear that teacher-led is the preferred, though not required, method of delivery. The phrase 'incorporated into each required credit' is also outlined and suggests that by having an online learning experience documented in district coursework, it is assumed that a student successfully completing these courses will have had an online learning experience.

Based on the guidelines, a quality online learning experience is a combination of structured, sustained, integrated, meaningful learning activities accessed via a telecommunications network. A student that has been successful in this type of experience should develop competency for being able to learn in a virtual environment (life long learning). It should be noted that students will have a variety of online learning experiences throughout their school years. The total collection across all grades 6-12 of these experiences are required to be a minimum of 20 hours. The intent of this document is to highlight the variety of experiences available and provide guidance to the varying qualities of these experiences. Through a collection of rich and diverse online learning experiences over time, a student is empowered to be productive in these types of learning experiences beyond school and into continuing education or the work place.

It is up to each district as to how to track the 20 hours of experiences. It is suggested that a district use the same manner of tracking online learning experiences as they currently do in tracking a student's community service hours. If students are using a Learning Management System such as Moodle or Blackboard, the log reports are easily accessible and very user friendly for determining the amount of time logged into the system. These online experiences may take place between grades 6-12 to meet the graduation requirement.

## Core Principles of Online Learning

It should be noted that both **online courses and online experiences are expected to:**

- Be organized in a coherent, sequential manner
- Have instructional goals, objectives, strategies, and assessments that are aligned with state standards, benchmarks and expectations
- Is comparable in rigor, depth and breadth to traditionally delivered curriculum
- Include the principles of Universal Design for Learning (<http://www.cast.org/research/udl/index.html> ) by providing multiple approaches to meet the needs of diverse learners
- Be relevant and address many learning styles
- Include asynchronous and/or synchronous interaction between teacher and student, and student-to-student
- Include teachers who are knowledgeable in web-based instruction techniques
- Incorporate resources outside the classroom
- Include a monitoring plan

## Essential Characteristics of Quality Online Learning Experiences

In order to fulfill the Online Experience requirement through incorporating the 20 hours of online learning experiences, it should be noted that quality online learning experiences have common characteristics and meet METS (Michigan Educational Technology standards - <http://www.techplan.org/> ). While each experience may not address every characteristic, it is assumed that upon completion of the minimum collective 20 hours of experiences, **each of the following characteristics will have been represented:**

<b>Characteristic</b>	<b>Explanation</b>
<b>Collaborative experience between students</b>	All students are required to be involved in developing working relationships with an educator and other students online. Look for online collaboration tools, such as a learning management system that must also include collaborative tools such as discussions/forums, Wikis, and Google Docs and Spreadsheets where students can work cooperatively asynchronously and synchronously.
<b>Integrated</b>	Every experience is not only aligned with METS but must also be aligned to Content Standards that support and enhance your curriculum content.
<b>Sustainability</b>	The experience(s) must provide an opportunity to practice using technology tools, explore the virtual learning environment and develop a comfort level operating in this space. This requires a period of time and is not accomplished in just one experience.
<b>Life-long Learning Skills</b>	As a result of the online learning experiences, students will develop proficiencies for online learning throughout their lives. They will become life-long learners and will develop and embrace online skills through accessing, analyzing and evaluating information resources; incorporating communication skills; and practicing problem-solving, interpersonal and self-directional skills.
<b>Teacher Involvement</b>	The teacher is involved in the online learning experience in any of these ways: guiding, facilitating, designing, monitoring, providing feedback, interacting, supporting, assessing and mentoring the online learning experience.

<b>Online Ethics &amp; Safety</b>	The teacher or online experience will include discussion of and access to information for students regarding issues of Internet safety, social networking, ethical responsibility, fair use and intellectual property rights (e.g. iSafe curriculum or participation, WebWise Kids CD Games, and NetSmartz kids Real-life Video Resources).
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As described earlier in the document, an online learning experience has several elements. *These are not meant to be stand-alone experiences* but opportunities to extend learning through online activities. It is important to note that the collective online learning experiences are meant to include a variety of experiences.

The tables on the following pages provide examples of online learning experiences. The "X" indicates which of the essential characteristics outlined previously usually occur in the experience. An asterisk beside Online Ethics & Safety denotes that this characteristic may not naturally occur in the experience listed, but denotes an opportunity to guide students in online ethics and safety through classroom discussion or an activity online (as noted above). For more information on Online Ethics and Safety, visit [www.remctoolkit.org](http://www.remctoolkit.org) and use keywords 'safety copyright'.

Online Experience	Quality Characteristics		Resources	METS
<b>WebQuest</b> – An inquiry-oriented activity in which most or all of the information used by students is online.		Collaboration	Discovery Education	<b>6-8</b> 2b-1,2c-2, 3a-2,5a-1,2,3,6b-1  <b>9-12</b> 1b-1,2a-1,2b-2,4,5, 5a-1,2,3,4,5b-1,6a-1, 6b-1
	X	Integration	<a href="http://school.discovery.com/">http://school.discovery.com/</a>	
		Sustainability	Kathy Schrock's guide for Educators	
	X	Life-long Skills	<a href="http://school.discovery.com/schrockguide/webquest/webquest.html">http://school.discovery.com/schrockguide/webquest/webquest.html</a>	
	X	Teacher Involvement	Blue WEB 'N	
	Online Ethics & Safety	<a href="http://www.kn.pacbell.com/wired/bluewebn/">http://www.kn.pacbell.com/wired/bluewebn/</a> Spartanburg County School District WebQuests <a href="http://www.spa3.k12.sc.us/WebQuests.html">http://www.spa3.k12.sc.us/WebQuests.html</a> Best WebQuests <a href="http://bestwebquests.com/">http://bestwebquests.com/</a>		
<b>Commentary</b>	WebQuests challenge students to explore the Web for information using appropriate links. They are not normally collaborative in nature, but look for WebQuests that include online activities, online research, collaboration, and talking with experts via email or real-time conferencing.			

Online Experience	Quality Characteristics		Resources	METS
<b>Educational Blog</b> - (short for weblog) - a personal online journal that is frequently updated and intended for public consumption.		Collaboration	WordPress	<b>6-8</b> 3b-1, 4a-1, 5c-1  <b>9-12</b> 1a-2, 1a-6,1b-1,2a-1, 2b-2, 2b-4,5,6, 3b-1, 4a-1,2,3,4,
	X	Integration	<a href="http://www.wordpress.com">http://www.wordpress.com</a>	
		Sustainability	EduBlogs	
	X	Life-long Skills	<a href="http://edublogs.com">http://edublogs.com</a>	
	X	Teacher Involvement	Ottawa Area ISD Blogs	
*	Online Ethics & Safety	<a href="http://blogs.oaisd.org">http://blogs.oaisd.org</a>		
<b>Commentary</b>	Blogs should be curriculum related and interactive with teachers and students alike providing comments.			

Online Experience	Quality Characteristics		Resources	METS
<b>Wiki</b> – collaborative editing place on the web	X	Collaboration	Wikispaces	<b>6-8</b> 2c-3, 3a-1, 2, 3b-1, 4a-1, 5c-1  <b>9-12</b> 1a-1, 1b-1, 2a-1, 3b-1, 4a-2, 6a-2,
	X	Integration	<a href="http://www.wikispaces.com/">http://www.wikispaces.com/</a>	
		Sustainability	Front Page	
	X	Life-long Skills	<a href="http://c2.com/cgi/wiki">http://c2.com/cgi/wiki</a>	
	X	Teacher Involvement	Wiki Design Principles	
*	Online Ethics & Safety	<a href="http://c2.com/cgi/wiki?WikiDesignPrinciples">http://c2.com/cgi/wiki?WikiDesignPrinciples</a> Wikipedia <a href="http://en.wikipedia.org/wiki/Wiki">http://en.wikipedia.org/wiki/Wiki</a> Wiki article – <i>A Glorified Whiteboard</i> <a href="http://www.edutopia.org/1756">http://www.edutopia.org/1756</a>		
<b>Commentary</b>	Wikis should be collaborative between teachers and students. This will involve students and teachers composing, peer editing and conducting discussions online.			

Online Experience	Quality Characteristics	Resources	METS
<b>Podcast/Videocast</b> - the distribution of audio or video files over the Internet for listening on mobile devices and personal computers.		Vocabulary Podcast from Princeton Review: <a href="http://www.princetonreview.com/vocabminute/default.asp">http://www.princetonreview.com/vocabminute/default.asp</a>	<b>6-8</b> 4b-1, 5c-1
	X	Integration	
		Sustainability	Vodcast example: Classroom lesson by students on dental hygiene led by "Dr. Molar" <a href="http://www.globalpodder.com/blojsom_resources/meta/dcrockett/drmolarvodcast.m4v">http://www.globalpodder.com/blojsom_resources/meta/dcrockett/drmolarvodcast.m4v</a> iSAFE vodcasts: <a href="http://xblock.isafe.org/idrive.php">http://xblock.isafe.org/idrive.php</a> Education Podcast Network <a href="http://epnweb.org">http://epnweb.org</a>
	X	Life-long Skills	
	X	Teacher Involvement	
*	Online Ethics & Safety		<b>9-12</b> 1a- 1,2,5,6, 1b-1,5, 2a-1,2, 3a-6,7, 2b-1, 2, 4, 4a-1,3, 4b-1, 6a-1
<b>Commentary</b>	The ability to time-shift content as opposed to traditional broadcast distribution models expands teaching and learning opportunities significantly.		

Online Experience	Quality Characteristics	Resources	METS	
<b>RSS Feed</b> - RSS stands for "Really Simple Syndication". It is a way to easily distribute a list of headlines, update notices, and sometimes content to a wide number of people. It is used by computer programs that organize those headlines and notices for easy reading.		What Is RSS? <a href="http://xml.com/pub/a/2002/12/18/dive-into-xml.html">http://xml.com/pub/a/2002/12/18/dive-into-xml.html</a>		
		Integration		
		Sustainability		Introduction to RSS <a href="http://www.webreference.com/authoring/languages/xml/rss/intro/">http://www.webreference.com/authoring/languages/xml/rss/intro/</a>
		Life-long Skills		RSS Tutorial <a href="http://www.mnot.net/rss/tutorial/">http://www.mnot.net/rss/tutorial/</a>
		Teacher Involvement		Feedster <a href="http://www.feedster.com/">http://www.feedster.com/</a>
		Online Ethics & Safety		
<b>Commentary</b>	Though listed in the guidelines, used by itself, this is really not an experience. It is the way a Podcast/vodcast is distributed or made available for subscription and is a software script, not a learning environment on its own.			

Online Experience	Quality Characteristics		Resources	METS
<b>Learning Management System</b> - a software application or Web-based technology that provides a teacher a way to create and deliver content, monitor student progress and assess performance.		Collaboration	Blackboard	<b>6-8</b> 1b-6, 2a-1, 2b-1, 2b-2, 2c-3, 3a-2, 3a-3, 3b-1, 4a-1, 4b-1  <b>9-12</b> 1a-4,6, 1b-1,3,6,7, 2a-1, 2b-2,4,5,6, 3-a-1,4 3b-1, 4a-2,3,4, 6a-2
	X	Integration	<a href="http://www.blackboard.com/">http://www.blackboard.com/</a>	
	X	Sustainability	Moodle	
	X	Life-long Skills	<a href="http://moodle.org">http://moodle.org</a>	
	X	Teacher Involvement	iSAFE mentor training <a href="http://xblock.isafe.org/imentors.php">http://xblock.isafe.org/imentors.php</a>	
		Online Ethics & Safety		
<b>Commentary</b>	Check with your REMC or ISD to see if they have a Learning Management System in place. Teacher created courses can include many of the elements needed to complete the online learning requirement such as interactive discussions, links to WebQuests, research project directions, rubrics and links, and can be a location for storing electronic portfolio elements.			

Online Experience	Quality Characteristics		Resources	METS
<b>Online Research</b> - teacher directed and guided practical online searching that weeds out poor or non-relevant sites and directs students to sites easily recognizable as valid and trustworthy.		Collaboration	MEL Internet:	<b>6-8</b> 2a-1, 2b-1, 3a-2, 5a-1, 5a-2, 5a-3, 6b-1  <b>9-12</b> 1b-1,5,6,7, 2a-1, 2b-2,4,5,6, 5a-1,2,3,4, 5b-1, 5c-1, 6a-1,6b-1
	X	Integration	<a href="http://www.mel.org">http://www.mel.org</a>	
		Sustainability	KnightCite Citation Tool	
	X	Life-long Skills	<a href="http://webapps.calvin.edu/knightcite/">http://webapps.calvin.edu/knightcite/</a>	
	X	Teacher Involvement	iTools	
*		Online Ethics & Safety	<a href="http://www.itools.com/">http://www.itools.com/</a> Research and Documentation Online <a href="http://www.dianahacker.com/resdoc/">http://www.dianahacker.com/resdoc/</a> The National Archives <a href="http://www.archives.gov/research/">http://www.archives.gov/research/</a> Noodle Tools <a href="http://www.noodletools.com/">http://www.noodletools.com/</a> Library of Congress <a href="http://www.loc.gov">http://www.loc.gov</a>	
<b>Commentary</b>	Students and teachers alike have free access to the Michigan eLibrary at school and home for online research. For home access, a drivers license or state ID number is necessary to access the research databases.			

Online Experience	Quality Characteristics	Resources	METS	
<b>Electronic Portfolio</b> - a type of learning record that provides actual evidence of achievement – a collection of electronic documents that demonstrate your skills		Collaboration	<p><b>6-8</b></p> <p>1b-3,6,8, 2b-1, 2c-3, 3a-1,2,3, 3,4, 4b-1, 5a-1, 2, 3, 5b-2,3, 5c-1, 6a-1, 6b-1</p> <p><b>9-12</b></p> <p>1b-1, 1b-5,6,7, 2a-1,2b-2,4,5,6, 2c-2,3a-4,7, 4b-1, 5c-1, 6b-1</p>	
	X	Integration		Creating an Electronic Portfolio <a href="http://cte.jhu.edu/techacademy/fellows/Spencer/webquest/lasindex.html">http://cte.jhu.edu/techacademy/fellows/Spencer/webquest/lasindex.html</a>
	X	Sustainability		Electronic Portfolios in the K-12 Classroom <a href="http://www.educationworld.com/a_tech/tech/tech111.shtml">http://www.educationworld.com/a_tech/tech/tech111.shtml</a>
	X	Life-long Skills		Electronic Portfolios: Students, Teachers, and Life Long Learners <a href="http://eduscapes.com/tap/topic82.htm">http://eduscapes.com/tap/topic82.htm</a>
	X	Teacher Involvement		
		Online Ethics & Safety		
<b>Commentary</b>	Electronic Portfolios provide students the opportunity to digitally collect and save their work to demonstrate achievement and growth. Check with your district or REMC or ISD for storage capabilities.			

Online Experience	Quality Characteristics	Resources	METS	
<b>Online Resource Validation</b> - process of confirming the validity of the data, information and/or source of web information.		Collaboration	<p><b>6-8</b></p> <p><b>9-12</b></p> <p>5a-1, 2, 3, 4, 5b-1</p>	
	X	Integration		Evaluating sites: <a href="http://www.siec.k12.in.us/west/online/eval.htm">http://www.siec.k12.in.us/west/online/eval.htm</a>
		Sustainability		<a href="http://www.oslis.k12.or.us/secondary/index.php?page=evaluateInfo">http://www.oslis.k12.or.us/secondary/index.php?page=evaluateInfo</a>
	X	Life-long Skills		Faux sites: <a href="http://zapatopi.net/treeoctopus/">http://zapatopi.net/treeoctopus/</a>
	X	Teacher Involvement		<a href="http://www.rythospital.com">http://www.rythospital.com</a>
		Online Ethics & Safety	<a href="http://www.DHMO.org">http://www.DHMO.org</a> <a href="http://www.mcwhortle.com">http://www.mcwhortle.com</a> <a href="http://www.martinlutherking.org">http://www.martinlutherking.org</a> Tips for Evaluating Sources <a href="http://www.dianahacker.com/resdoc/tips.html">http://www.dianahacker.com/resdoc/tips.html</a>	
<b>Commentary</b>	This is an essential skill in the area of research whether for academic or personal reasons			

Online Experience	Quality Characteristics		Resources	METS
<b>Interactive Discussions with Experts</b> – a connection via audio and video (video conferencing) or audio (phone conferencing) with an expert.		Collaboration	Video Conference Adventures <a href="http://www.kn.att.com/wired/vidconf/adventures.html">http://www.kn.att.com/wired/vidconf/adventures.html</a> TWICE Fieldtrip Database <a href="http://www.twice.cc/fieldtrips.html">http://www.twice.cc/fieldtrips.html</a> Global Leap Videoconferencing in the Classroom <a href="http://www.global-leap.com/">http://www.global-leap.com/</a> Videoconferencing for Learning <a href="http://www.kn.pacbell.com/wired/vidconf/vidconf.html">http://www.kn.pacbell.com/wired/vidconf/vidconf.html</a>	<b>6-8</b> 4a-1, 4b-1  <b>9-12</b> 1a-1, 6, 1b-1, 4a-1,2,4, 5c-1, 6a-2,
	X	Integration		
		Sustainability		
	X	Life-long Skills		
	X	Teacher Involvement		
	*	Online Ethics & Safety		
<b>Commentary</b>	While most conferences include elements of collaboration, extending this experience to include meaningful collaborative experiences beyond the actual conference utilizing online discussion boards or forums with the expert about the experience in order to extend their learning, which also addresses sustainability, would complete this online experience.			

Online Experience	Quality Characteristics		Resources	METS
<b>Interactive Discussions between Students</b> – a connection using video and audio (video conferencing) or audio (phone conferencing) with another class.		Collaboration	Breeze <a href="http://www.adobe.com/products/breeze/">http://www.adobe.com/products/breeze/</a> Net Meeting <a href="http://www.microsoft.com/windows/netmeeting/">http://www.microsoft.com/windows/netmeeting/</a> TWICE Projects <a href="http://www.twice.cc/projects.html">http://www.twice.cc/projects.html</a> Read Around the Planet <a href="http://www.twice.cc/read/index.html">http://www.twice.cc/read/index.html</a>	<b>6-8</b> 4a-1, 4b-1  <b>9-12</b> 4a-1,2,3,4, 6a-2
	X	Integration		
		Sustainability		
	X	Life-long Skills		
	X	Teacher Involvement		
	*	Online Ethics & Safety		
<b>Commentary</b>	While most conferences include elements of collaboration, extending this experience to include meaningful collaborative experiences beyond the actual conference utilizing online discussion boards or forums with the expert about the experience in order to extend their learning, which also addresses sustainability, would complete this online experience.			



Online Experience	Quality Characteristics		Resources	METS
<b>Online Field trips</b> - high-tech field trips on the web that offer video and audio segments to make the visit more interactive and provide opportunities for new discovery in the classroom.		Collaboration	Online Tours	<b>6-8</b> 3a-2  <b>9-12</b> 1a-6, 1b-1, 4a-1,4, 5c-1, 5b-1,
	X	Integration	<a href="http://www.nps.gov/archive/yell/tours/">http://www.nps.gov/archive/yell/tours/</a>	
		Sustainability	EnviroMysteries	
	X	Life-long Skills	<a href="http://enviromysteries.thinkport.org">http://enviromysteries.thinkport.org</a>	
	X	Teacher Involvement	Quick Time Virtual Field Trips	
	Online Ethics & Safety	<a href="http://www.uh.edu/~jbutler/anon/quick.html">http://www.uh.edu/~jbutler/anon/quick.html</a> Geological Field Trips <a href="http://homepage.smc.edu/robinson_richard/fieldtrips.htm">http://homepage.smc.edu/robinson_richard/fieldtrips.htm</a> Virtual and Online Geologic Field Trips <a href="http://www.lib.utexas.edu/geo/onlineguides.html">http://www.lib.utexas.edu/geo/onlineguides.html</a> Online Field Trips <a href="http://www.thinkport.org/Classroom/trips.tp">http://www.thinkport.org/Classroom/trips.tp</a> Tramline <a href="http://www.field-trips.org/trips.htm">http://www.field-trips.org/trips.htm</a>		
<b>Commentary</b>	Online field trips generally contain rich multimedia about a curricula area. Consider extending this experience to include meaningful collaborative experiences beyond the actual web material.			

Online Experience	Quality Characteristics		Resources	METS
<b>Online Simulations</b> – a web-based re-creation of an authentic experience		Collaboration	Cells Alive	<b>6-8</b> 3a-2  <b>9-12</b> 1b-1, 6a-1
	X	Integration	<a href="http://cellsalive.com">http://cellsalive.com</a>	
		Sustainability	Net Frog	
	X	Life-long Skills	<a href="http://frog.edschool.virginia.edu/">http://frog.edschool.virginia.edu/</a>	
	X	Teacher Involvement	3-D Cell project	
	Online Ethics & Safety	<a href="http://www.ibiblio.org/virtualcell/tour/cell/cell.htm">http://www.ibiblio.org/virtualcell/tour/cell/cell.htm</a> What Are Simulations? <a href="http://olc.spsd.sk.ca/DE/PD/instr/strats/simul/index.html">http://olc.spsd.sk.ca/DE/PD/instr/strats/simul/index.html</a> Science Courseware <a href="http://www.sciencecourseware.org/">http://www.sciencecourseware.org/</a> Michigan Courts <a href="http://courts.mi.gov/plc/KidJustice/index.htm">http://courts.mi.gov/plc/KidJustice/index.htm</a>		
<b>Commentary</b>	Students will experience online experiments and simulations that re-create an authentic experience.			

Online Experience	Quality Characteristics		Resources	METS
<b>Educational Gaming -</b> Online gaming in education implies experiential, discovery-driven learning through play.		Collaboration	Article – <i>A New Series on Educational Gaming</i>	<b>6-8</b> 3a-2
	X	Integration	<a href="http://www.xplanazine.com/archives/2006/04/a_new_series_on.php">http://www.xplanazine.com/archives/2006/04/a_new_series_on.php</a>	
		Sustainability	PeaceMaker	<b>9-12</b> 1b-1, 6a-1
	X	Life-long Skills	<a href="http://www.peacemakergame.com/">http://www.peacemakergame.com/</a>	
	X	Teacher Involvement	Geography Online Games <a href="http://www.shambles.net/pages/learning/GeogP/geoggames/">http://www.shambles.net/pages/learning/GeogP/geoggames/</a>	
	*	Online Ethics & Safety	Career Games Online <a href="http://www.shambles.net/pages/learning/counsellor/cargames/">http://www.shambles.net/pages/learning/counsellor/cargames/</a> Art Games <a href="http://www.shambles.net/pages/learning/artdesign/artgames/">http://www.shambles.net/pages/learning/artdesign/artgames/</a> Peter Packet <a href="http://www.peterpacket.org/">http://www.peterpacket.org/</a> Food Force <a href="http://www.food-force.com/">http://www.food-force.com/</a> Darfur <a href="http://www.darfurisdying.com/">http://www.darfurisdying.com/</a> Disaffected <a href="http://www.persuasivegames.com/games/game.aspx?game=disaffected">http://www.persuasivegames.com/games/game.aspx?game=disaffected</a> Michigan Courts- <a href="http://courts.mi.gov/plc/KidJustice/index.htm">http://courts.mi.gov/plc/KidJustice/index.htm</a>	
<b>Commentary</b>	Digital gaming can provide students will essential skills for 21st Century life, such as collaboration, risk taking, strategy formation and completion.			

Online Experience	Quality Characteristics		Resources	METS
<b>Online Project</b> - a curriculum lesson that incorporates a variety of online activities.		Collaboration	United Streaming Assignment Builder	<b>6-8</b> 4a-1, 4b-1  <b>9-12</b> 1a-2, 4a-1,2,4
	X	Integration	<a href="http://unitedstreaming.com">http://unitedstreaming.com</a>	
		Sustainability	ThinkQuest	
	X	Life-long Skills	<a href="http://www.thinkquest.org/">http://www.thinkquest.org/</a>	
	X	Teacher Involvement	Twice Exchange Projects	
	Online Ethics & Safety	<a href="http://www.twice.cc/projects.html">http://www.twice.cc/projects.html</a> The Online Teacher Resource <a href="http://www.teach-nology.com/teachers/educational_technology/online_projects/">http://www.teach-nology.com/teachers/educational_technology/online_projects/</a> Partner Projects <a href="http://www.k12science.org/partnerprojs.html">http://www.k12science.org/partnerprojs.html</a> Real Time Data Projects <a href="http://www.k12science.org/realtimetypeproj.html">http://www.k12science.org/realtimetypeproj.html</a> Ask An Expert Sites <a href="http://www.k12science.org/askanexpert.html">http://www.k12science.org/askanexpert.html</a> Primary Source & Archived Collections Projects <a href="http://www.k12science.org/primarysourceproj.html">http://www.k12science.org/primarysourceproj.html</a> Collaborative Projects <a href="http://www.k12science.org/collabprojs.html">http://www.k12science.org/collabprojs.html</a> NASA Quest <a href="http://quest.arc.nasa.gov/">http://quest.arc.nasa.gov/</a> Teaching with Primary Sources <a href="http://206.102.88.36/projects/kdli/html/index.html">http://206.102.88.36/projects/kdli/html/index.html</a>		
<b>Commentary</b>	Look for a lesson that integrates collaborative and research components.			

Online Experience	Quality Characteristics		Resources	METS
<b>Test Preparation Tool</b> - web-based practice test taking and feedback		Collaboration	MEAP/ACT <a href="http://www.mivhs.org/content.cfm?ID=667">http://www.mivhs.org/content.cfm?ID=667</a>	<b>6-8</b> 3a-2, 6b-1  <b>9-12</b> 1b-1, 3a-1,5, 6a-1
	X	Integration	LearningExpress Library through MEL	
		Sustainability	<a href="https://elibrary.mel.org">https://elibrary.mel.org</a>	
	X	Life-long Skills	Content Alignment with the ACT (High School)	
		Teacher Involvement	<a href="http://www.actstudent.org/testprep/">http://www.actstudent.org/testprep/</a>	
	Online Ethics & Safety	Content Alignment with the ACT Work Keys (High School) <a href="http://www.act.org/workkeys/assess/math/levels.html">http://www.act.org/workkeys/assess/math/levels.html</a>		
<b>Commentary</b>	Practice tests and test preparation materials are available with instant feedback. When the student has completed the test, the results will be displayed and may be printed or emailed to their teacher.			

Online Experience	Quality Characteristics		Resources	METS
<b>Career Planning Tools</b> - -structured and extended web-based programs incorporating interest inventories, career exploration and portfolio compilation		Collaboration	MDX	<b><u>6-8</u></b>
	X	Integration	<a href="http://www.mois.org/content.cfm?ID=689">http://www.mois.org/content.cfm?ID=689</a>	2c-1, 2c-2
	X	Sustainability	Career Cruising	
	X	Life-long Skills	<a href="http://www.careercruising.com/default.asp">http://www.careercruising.com/default.asp</a>	<b><u>9-12</u></b>
	X	Teacher Involvement		1b-1, 2c-1,2,
Commentary	Students compile materials and keep track of their EDPs online. They may complete online interest inventories and do online research while exploring Career Tools.			