LISD 23 Things Technology Integration Lesson Plan

For latest Draft Version (April, 2009, Pending SBE approval)) of *K-12 Michigan Educational Technology Standards for Students (METS-S 2009) with Alignments to 2007 NETS-S and 21st Century Skills*, go to <u>http://www.techplan.org/mets2009</u>. (If document is no longer posted, go to <u>http://techplan.org</u> for information on the current status of METS-S since summer 2009.)

Information on the *National Educational Technology Standards for Students (NETS-S), as well as for Teachers and Administrators,* is available at <u>http://iste.org/NETS</u> (International Society for Technology in Education).

Because many districts have their own lesson plan template for teachers to follow, in developing a lesson plan for this course requirement, it is suggested that teachers follow a format that will be useful for them in actually incorporating a lesson in their real-world classroom with students.

Following are some examples of rubrics for integration of technology into lesson plans in other content areas, as well as some useful guidelines for integrating technology into a lesson. Notice that the language in some uses the term "transformative" for exemplary lesson plans; that is, taking the focus of the lesson or task <u>beyond</u> "integration" to changing how teachers teach and how students learn. Some studies have suggested that teachers may realistically achieve this level of transformative technology use in the classroom over a longer period of time, <u>with ongoing, sustained professional development and follow-up, equivalent to</u> <u>possibly 70 or more hours of quality instruction and learning over a length of two to five years.</u> It would not be realistic to expect that classroom teachers just beginning this change process, moving along the learning continuum and just starting to think about the possibilities for using web 2.0 applications with their students, while they, themselves, as adult learners, are only beginning to gain some comfort level with these technologies, would necessarily achieve exemplary level in all of these design criteria.

It may be helpful, though, for teachers to read through these rubrics and become more familiar with the concepts. For purposes of this course, Siena Heights University only asks for an assessment of Pass/Fail from the instructors, and the fact that you are making the effort to create and submit a realistic, useful lesson plan to try with your own students in the coming year is the expectation. Therefore, please submit a lesson plan in a format that will be useful for you. It your school does not have a template you are required to follow, please feel free to use one of the following acceptable rubrics for designing your lesson plan, or pull out the criteria from examples below that are most helpful to you in planning your lesson. In the end, it is your lesson plan and should be useful to you.

*HELPFUL GUIDELINES FOR TECHNOLOGY INTEGRATION LESSON PLAN DESIGN

Lesson Plan Format to Consider: (you may want to include some of these areas in your plan or follow a format suggested by your own district):

Grade Level/Subject Area Assessment: What is it the student needs to know or be able to do, and how will you assess this?

Content Indicator

Lesson Objective

Learning Goal (connecting the content area indicator to the educational technology standard – see MET-S – link above)

Before you go too far, think about these questions: .

- a. Is the use of technology appropriate for this lesson? Why? Why not? If the answer is no, find another lesson for which technology integration is appropriate and then complete the planning tool.
- b. Do I know how to use the technology tool(s) that will be used by my students?
- c. What technology skills do my students already have that are needed for this lesson?
- d. What technology skills will they need to learn to complete this lesson successfully?
- e. What is the appropriate setting for this lesson (i.e. classroom, lab, mini-lab)? Is this setting available for use by my students?
- f. Is the software I need for this lesson installed on the computers I will be using?
- g. Will I need a projector, printer, digital camera, or other peripherals, and will they be available when and where I need them?
- h. How much time can I allow for this lesson? Can this lesson be successfully completed in this amount of time?
- i. Who can help me with the planning and/or implementation of this lesson?

Product Focus:

 Explains what students will produce and how it is connected to what they are learning and includes a sample prototype of a finished product: Includes an explanation of whether you intend to use the student product(s) for other instructional purposes (*i.e.*, sharing, gallery walk, data collection, ongoing instruction).

• Incorporates elements of proper design, e.g., font size, title, layout:

Lesson Implementation

- May Include:
 - Procedures for teaching the content and technology
 - Background information, including where the lesson occurs in the unit, prior knowledge, etc.
 - Next steps in instruction

Instructional Strategies

• Explanation of what strategies will be used in this lesson to engage students:

Technology Management Strategies (site dated, but some good tips at http://www.educationworld.com/a_tech/tech116.shtml)

- Includes management strategies as applicable:
 - $_{\circ}$ $\,$ Location: lab or classroom
 - o Grouping: independent, large group, or small group
 - o Adult or peer assistants required
 - Appropriate instructional strategies employed
 - Adapted to fit computer/software availability
 - Fits time constraints
 - Anticipates problems with the technology (need for troubleshooting or backup plan)

Accommodations

- Includes differentiation as applicable:
 - Facilitates equitable access for all students
 - Adapted to enable students who require remediation or more time to finish
 - Adapted to accommodate students with special needs
 - o Identifies what is being differentiated: content, process, product, or learning environment
- Extension or challenge activity for advanced students: Follow-up activity suggested

*adapted from Office of Instructional Technology Planning Tool for Technology Integration document, Baltimore (Maryland) County Public Schools, Maryland, 2004, http://www.bcps.org/offices/OIT/word_files/PlanningToolforTechnologyIntegration.doc

Example Lesson Plan Rubric #1 from North Central Regional Technology in Education Consortium

Adapted from <u>http://www.ncrtec.org/tl/sgsp/lpsg.htm</u>

	5	4	3	2	1	0	Comments
Standards/ Learning Objectives	Curriculum standards and learning objectives are specific and focused, intentionally driving the use of technology.		Curriculum standards and learning objectives are correlated to technology uses.		Curriculum standards and learning objectives are superficial uses of technology.	No demonstration of curriculum standards and learning objectives connected to the use of technology.	
Curriculum Linking with Technology Uses	Curriculum linking creates unique content learning benefits. Content learning experiences/benefits are extended and would be impaired or impossible without the use of technology.		Curriculum linking adapts or varies present student learning or work. Content learning experiences or benefits are enhanced but possible without the use of technology.		Curriculum linking provides "topics" for technology skills or uses. Content learning incidental—student uses primarily to learn/practice technology skills.	Curriculum linking is incidental to technology use. Content learning not focused. Technology uses are mostly supplemental, or to provide fun/motivation activities.	
Cognitive Tasks	Task requires synthesis and evaluation of information. Going beyond existing understanding to create own original position or product. Knowledge creation is expected.		Task requires analysis of information and/or putting together information from several sources to demonstrate an understanding of existing knowledge.		Task requires little analysis and is focused on simplistic tasks or concepts using a single source. Cookie-cutter, look- alike products are likely to develop.	The task has little relevance to content learning.	

Assessment Practices	Student product assessed on content as well as the effective, appropriate use of technology to promote or communicate the learner's understanding. * Students designed assessment tools.	Assessment focused on technical aspects of student-produced materials. * Students are partners in designing assessment tools.	Assessment focused on completion of task or project * Students are informed or guided by an assessment tool designed by teacher	There is no evidence of assessment of student technology use	
Preparation for Learning Tasks	 * Extensive preparation expected (i.e. story- boarding, web-mapping, outlining). * Students are expected to critically select appropriate resources. 	 * Adequate preparation is expected. * Teacher organizes multiple resources for students to use. 	 * At least one preparation task is expected. * A single resource is identified and assigned for student use. 	 * Preparation tasks are missing or weak. * No resource- gathering is identified or expected. 	
Overall Focus of Technology Use	Technology uses primarily "Transforming." Task creates new learning stories with new tools.	Technology uses primarily "Integrating." Task creates same learning stories with new tools.	Technology uses primarily "Literacy." Task creates technology skill stories.	Technology uses are primarily organized as a peripheral activity at this time. Task creates no learning stories other than technology use.	

Example Lesson Plan Rubric #2

Scale: Exemplary Satisfactory Needs Improvement				
		DARDS		
	Exemplary	Satisfactory	Needs Improvement	COMMENTS
	The lesson is aligned with the content standard, indicator, and objective(s).	The lesson is partially aligned with the content standard, indicator, and objective(s).	The lesson is not aligned with the content standard, indicator, and objective(s).	
	The lesson is aligned with the technology learning goal and indicator.	The lesson is partially aligned with the technology learning goal and indicator.	The lesson is not aligned with the technology learning goal and indicator.	
	Exemplary	Satisfactory	Needs Improvement	COMMENTS
	The assessment(s) measures mastery of both the content and the technology standards and has been communicated to students clearly and explicitly. Students are aware of how they will be evaluated and how it relates to their learning.	The assessment(s) measures to some extent both the content and the technology standards and has been communicated to students in general terms. Students are somewhat aware of how they will be evaluated and how it relates to their learning.	The assessment(s) does not measure the content nor the technology standards and has not been communicated to students. Students are not aware of how they will be evaluated nor of how it relates to their learning.	
	Exemplary	Satisfactory	Needs Improvement	COMMENTS
	The assessment is product focused and students clearly see the connection between what they are learning and what they are producing.	The assessment includes a product and students see in general terms the connection between what they are learning and what they are producing.	The assessment does not include a product.	

The student product demonstrates a high level of student learning and proper design techniques.	The student product demonstrates some student learning and design techniques.	The student product does not demonstrate student learning nor proper design techniques.	
	INSTRUCTION WITH TEC		
Exemplary	Satisfactory	Needs Improvement	COMMENTS
The resources for the lesson are appropriate and well documented.	The resources for the lesson are somewhat appropriate and partially documented.	The resources for the lesson are not appropriate and/or are not documented.	
The use of technology is appropriate for the grade level and enhances achievement of the content indicator.	The use of technology is somewhat appropriate for the grade level and to some extent furthers the achievement of the content indicator.	The use of technology is not appropriate for the grade level and does not support the achievement of the content indicator.	
The procedures for the lesson are well documented and easy to follow.	The procedures for the lesson are partially documented and can be followed.	The procedures for the lesson are not well documented and are difficult to follow.	
The instructional strategies will lead to student achievement of the content indicators.	The instructional strategies will lead to some students achieving the content indicators.	The instructional strategies will not lead to student achievement of the content indicators.	
The instructional strategies are highly engaging and authentic; provide students the opportunity to work with others; and affirm their performances.	The instructional strategies are to an extent engaging and authentic; provide students minimal opportunity to work with others; and somewhat affirm their performances.	The instructional strategies are not engaging nor authentic; do not provide students the opportunity to work with others and do not affirm their performances.	

The lesson includes management strategies for the implementation of technology that support student mastery of both the content and technology standards.	The lesson includes some management strategies for the implementation of technology that support student mastery of both the content and technology standards.	The lesson does not include management strategies for the implementation of technology that support student mastery of both the content and technology standards.	
	ACCOMM	ODATIONS	
Exemplary	Satisfactory	Needs Improvement	COMMENTS
The lesson includes excellent differentiation and extension strategies that support success for all students.	The lesson includes some differentiation and extension strategies that support success for some students.	The lesson does not include differentiation and extension strategies that support success for all students.	
Exemplary	Satisfactory	Needs Improvement	COMMENTS
The final reflection thoroughly discusses the use of technology in the lesson and the effectiveness of the scoring tool.	The final reflection partially discusses the use of technology in the lesson and the scoring tool.	The final reflection does not discuss the use of technology in the lesson and the effectiveness of the scoring tool.	
The final reflection demonstrates a thoughtful and complete evaluation of the lesson after teaching. It includes several excellent suggestions to improve the lesson in the future.	The final reflection demonstrates a partial evaluation of the lesson after teaching. It includes only a few minor suggestions for improvement in the future.	Major components of a thoughtful and complete evaluation of the lesson are missing from the final reflection. No suggestions are included to improve the lesson in the future.	