

## CEP 810: TEACHING FOR UNDERSTANDING WITH TECHNOLOGY

### COURSE OVERVIEW

---

In this course, the emphasis is placed on instructional applications of technology. Participants begin to establish a plan for continuing their own learning outside of the course by setting goals and using a variety of resources to keep up-to-date on issues related to education and educational technology. Participants will begin to develop a Personal Learning Network (PLN), and explore the benefits of online collaboration. Participants will also learn about using the Internet to conduct research, as well as working safely (and securely) on your own and with students online.

### COURSE TOPICS

---

- Productivity Tools
- Digital Citizenship
- Learning Theories
- Copyright & Creative Commons
- 21<sup>st</sup> Century Skills
- TPACK Framework

### COURSE OBJECTIVES

---

Upon completion of this course, it is expected that students will **understand**:

- The differences between the different office suites that are available online, as freeware and as software you can purchase.
- The importance of personal learning networks in continuing one's education.
- Their rights and responsibilities as digital citizens and how to support their students without restricting exploration.
- The TPACK framework and how it applies to their teaching and classroom.
- Ways in which technology both helps and hinders the mission of education based upon how it is used and the educational goals that are the focus.

Upon completion of this course, it is expected that students will **know how to**:

- *Apply both general productivity software (including word processing, data management, and desktop presentation) and special educational software in the educational environment in support of achieving educational goals.*
- *Apply web-based tools and resources in the educational environment in support of achieving educational goals.*
- *Employ web-based tools and resources in support of personal productivity in the educational setting as well as professional development and lifelong learning.*

## COURSE FORMAT

---

The course will be divided into 8 sessions – each session will be broken down by the following:

### **(1) Learn, (2) Explore, (3) Create, (4) Share**

**(1) Learn** activities will include “lectures” and readings to support your growth during the course. We will cover wide ranging topics like Personal Learning Networks, Getting Things Done, Copyright, Internet Security, Digital Citizenship, Creativity, TPACK, Learning Theories, Cloud Computing, International, state and school technology standards, and Mobile Learning. You will learn about these topics through peer interaction, traditional readings and guest lectures.

**(2) Explore** activities include hands-on, lab and case studies where we will learn about:

Social Networks, PC Maintenance and Security, Social Bookmarking, Creative Commons, Productivity Tools, Twitter, and Google Tools. This is a participatory portion of the course where you will be given small (or sometimes large) tasks and asked to complete them as part of your participation grade.

**(3) Create** activities have you producing products that synthesize and embody the **knowledge** and **explore** activities. These products are meant to be directly applicable and useful to your current teaching practice and personal growth. (Some may call these the “major” projects of the course.) These projects will be explained in greater detail later in this syllabus.

**(4) Share** - you will be sharing your work internally and externally with the Personal Learning Network (PLN) you will be fostering during the course. We will have a heavy emphasis on sharing and publishing work with open and social media tools such as Twitter, and leveraging existing peer networks.

## IMPORTANT INFORMATION

---

### **MSU Minimum GPA Policy**

MSU, the College, the CEPSE Department, and the MAET program all have a policy that requires MA students to maintain a minimum cumulative GPA. "If, upon completion of 18 or more graduate credits, the student has not attained a grade–point average of 3.00 or higher, he or she becomes ineligible to continue work toward the master's degree in the College." - *from Academic Standards, University Graduate Policy - Education, p. 1.*

### **MSU Minimum Course Grade Policy**

There is also a policy regarding credit and grades for MA courses. According to MSU policy, students cannot receive credit for any course with a grade below 2.0. You will have to take an extra course if you earn below a 2.0 grade on any course.

"In particular graduate programs the number of 2.0 grades acceptable for credit may be expressly restricted and/or levels higher than the 2.0 minimum may be established for the fulfillment of degree requirements." (In the MAET program, no 2.0 grades can be applied toward your degree) - *from MSU General information, policies, procedures, and regulations, p. 22.*

## **Academic Honesty Policy**

"The principles of truth and honesty are recognized as fundamental to a community of teachers and scholars. The University expects that both faculty and students will honor these principles and in so doing protect the validity of University grades. This means that all academic work will be done by the student to whom it is assigned, without unauthorized aid of any kind. (See General Student Regulation 1.00, Scholarship and Grades, for specific regulations.) Instructors, for their part, will exercise care in the planning and supervision of academic work, so that honest effort will be positively encouraged." - *from MSU General information, policies, procedures, and regulations, p. 24.*

## **LATE WORK POLICY**

---

In an online course it is easy to get behind on your assignments. In some cases certain assignments build upon others so it is imperative that you complete all the assignments on time. You have plenty of notice with your assignments, so last minute glitches and minor illnesses are not acceptable excuses. You should anticipate computer troubles. Things like erasing your files, losing your files or media storage, and/or computer problems should be considered possible events when trying to complete your work so give yourself plenty of time to submit an assignment. All graded assignments will be accepted late for these penalties:

- 2 days late subtract 10%
- 3-4 days late subtract 20%
- 5-7 days late subtract 50%
- more than 7 days late subtract 100%

## **GRADING SCALE**

---

Assigning grades is not an easy task and we want to be fair to each and every one of you (both individually and collectively) in our grading. We understand that each of you came into the course with different skill levels with respect to technology and that we cannot expect the same kind of work from each of you. And we do not. We factor in where each of you have started from and where you are today in our grading.

- All work is submitted to the portfolio website and grading will be based upon successful completion of the course portfolio. Grades for each assignment will be posted on the course portfolio website.
- Grade percentage totals for work submitted are available at the bottom of the student portfolio page.

# Michigan State University

- A 4.0 will be given for a total of 94% or higher (if all assignments have been completed). 3.5 for 87%-93%, and 3.0 for 80-86%.
- All work should be spell-checked, grammar-checked, and proofread BEFORE submission.
- **Meeting the rubric requirements does not guarantee full points on any assignment. You must go above and beyond the minimum requirements listed in the rubric in order to earn full points.**
- Students may resubmit any assignment ONCE, to improve a grade.

## SESSIONS

---

### Week 1

- *Introduction to the Course*
- *Productivity Tools*
- *Overview of Web 2.0*
- *Cloud Computing*
- *Introduction to Online Collaboration*

### Week 2

- *Review and Overview*
- *Personal Learning Networks (PLN)*
- *Getting Things Done (GTD)*

### Week 3

- *Review and Overview*
- *Digital Citizenship*
- *Internet Security*

### Week 4

- *Review and Overview*
- *Copyright*
- *Creativity*

### Week 5

- *Review and Overview*
- *Learning Theories*
- *TPACK*

### Week 6

- *Review and Overview*
- *ISTE NETS for Students and Educators*
- *21<sup>st</sup> Century Skills*

### Week 7

- *Review and Overview*
- *Overview of Mobile Learning*

### Week 8

- *Review and Overview*
- *Course Evaluation and Wrap Up*

## COURSE READINGS

---

Warlick, David. Grow Your Own Professional Network: New Technologies Can Keep You Connected and Help You Manage Information Overload. Learning and Leading with Technology. March/April 2009. p. 12-16.

Allen, David. 5 Phases of Mastering Workflow. GTD Tools. 2006.

Heverly, Robert A. "Growing Up Digital: Control and the Pieces of a Digital Life." Digital Youth, Innovation, and the Unexpected. Edited by Tara McPherson. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning. Cambridge, MA: The MIT Press, 2008. 199–218. doi: 10.1162/dmal.9780262633598.199

Mishra, P., & Koehler, M. J. (2009, May). Too Cool for School? No Way! Learning & Leading with Technology, (36)7. 14-18.

Bronson, Po & Merryman, Ashley. "The Creativity Crisis". Newsweek. 10 July 2010.

Montgomery, Susan M. & Groat, Linda N. "Student Learning Styles and Their Implications for Teaching," CRLT Occasional Paper #10, 1998, University of Michigan, Center for Research on Learning and Teaching.

NETS for Students 2007. International Society for Technology in Education.

NETS for Teachers 2008. International Society for Technology in Education.

NETS for Administrators 2009. International Society for Technology in Education.

NETS for Technology Facilitators and Leaders. International Society for Technology in Education.

Creating 21st Century-Ready Teachers. Atomic Learning. 2009

Holzberg, Carol S. Head in the Clouds. Tech and Learning. San Bruno: Jul 2009. Vol. 29, Issue 12; pg. 20

## REQUIREMENTS AND GRADING FOR CEP 810

---

### Personal Growth Plan

#### General idea

A major goal of the Certificate courses is that they integrate with your own learning needs and goals well. To help accomplish this task - as well as to assess your progress - you are to write a **personal growth plan** that describes how you hope to grow as an educator as a result of this class. This is a document that will be revisited

# Michigan State University

(and revised/added to) throughout the course. Upon completion of the Productivity Tools lab, you should have created a GoogleDoc entitled yourlastname\_notebook. We will be using this document throughout the semester to build on your work.

For this initial assignment (Part One of yourlastname\_notebook), write a brief goal statement for your personal growth goals in each of two areas:

1. Using technology to make a difference in education
2. Increasing your skill in using technology

**Possible Application:** It has often been said that if you aim at nothing you're pretty sure to hit it. Furthermore, we know that learner intentionality is very important in learning. This document you are to write may serve as a model for something your students or your colleagues would write at the start of a course unit or school year.

## Program:

GoogleDocs

| Rubric Dimension  | Value |
|---|-------|
| <b>Quality <i>Making a Difference</i> goals</b> <ul style="list-style-type: none"><li>• Represents goals that are thoughtful and reasonable</li></ul> | 5     |
| <b>Quality <i>Technology</i> goals</b> <ul style="list-style-type: none"><li>• Represents goals that are thoughtful and reasonable</li></ul>          | 5     |

## PLN Visualization

### General Idea

You already have a personal learning network in existence. Even if you're new to twitter or online social networking, we all have people that we email, text, Facebook, call or ask for help (and vice versa.)

For this activity, you are going to visualize your PLN. Your challenge is to:

Think about your PERSONAL LEARNING NETWORK

- Whom do you connect with?
- Where (when) do (did) the connections take place?
- What types of things do you learn from these people?

### REPRESENT THIS VISUALLY

Make sure to set a timer and do not spend more than 30 minutes on this activity!

This is (intentionally) a very open ended task - you can use ANY technology to visualize your PLN, be creative!

Post your creations in the [Discussion forum \(PLN\)](#) in ANGEL along with a brief description of your PLN and how you expect your network to grow and change with the new technologies you are learning.

**Program:**

Any technology to visualize your PLN

| Rubric Dimension  | Value |
|---|-------|
| <p><b>Effective Use of Technology</b><br/>           A visual representation of your Personal Learning Network that demonstrates your technical ability to create a visualization that is attractive and professional looking. This visualization answers these following questions:</p> <ul style="list-style-type: none"> <li>• Whom do you connect with?</li> <li>• Where (when) the connections take place?</li> <li>• What types of things you learn from these people?</li> </ul> | 10    |
| <p><b>A thoughtful description of your Personal Learning Network.</b><br/>           It should include:</p> <ul style="list-style-type: none"> <li>• A brief description of your PLN</li> <li>• A description of how you expect your network to grow and change with the new technologies you are learning.</li> </ul>  | 10    |

**Personal Growth Plan (Part 2)**

**General idea**

In the Getting Things Done lecture you learned about workflow process. Creating this type of workflow process is not easy and it takes some time, but it is very worthwhile. Take some time now and [go through each step](#) and decide how you will do each step. What will your inbox be? If you listen to the podcast in the readings session you will hear two people tell about their experience at implementing this workflow process. One said that he had to do it with paper for three weeks just to get used to the process and then he was able to move it to an iPhone app. The other has a program on his Mac. It is up to you what you choose. Once you get your system in place, start the system. Of course the first time through that inbox will take the longest. Once you have gone through the process once, (get to the do process), add Part 2 to your Personal Growth Plan (add to your Google Doc: yourlastname\_ notebook) and answer the following questions:

- How did you organize your process?
- Are you using paper and pencil, a phone, a piece of software?
- What was it like for you going through the process the first time?
- Do you think that this process will help you? Why or why not?
- Do you think you will continue this process? If not, what will your process be?

**Program:**

GoogleDocs

| Rubric Dimension  | Value |
|---|-------|
| <p><b>Thoughtful Reflection</b><br/>           Each person begins this course with a different set of knowledge, skills, and experiences. This reflection should represent what you learned from the "Getting Things Done" process.</p> | 20    |

## Personal Growth Plan (Part 3)

### General Idea

For your Personal Growth Plan (Part 3), write about the tutorials you chose to complete by answering the following questions:

1. Which tutorial did you choose?
2. What was one thing you learned that you will definitely be sharing with others? Why?
3. Was there any information that surprised you?

### Program:

GoogleDocs

| Rubric Dimension   | Value |
|--|-------|
| <b>Thoughtful Reflection</b><br>Each person begins this course with a different set of knowledge, skills, and experiences. This reflection should thoughtfully represent what you learned from the PC Maintenance and Internet Security Lab. | 20    |

## MAET SIG Proposal (The Beginning)

### General Idea

This proposal should define a special interest group (SIG) for your assigned group in class. It should define an area of educational technology (e.g., a particular grade level, subject matter area, use of technology).

Once you form your groups and have a strong foundation for your SIG, outline your goals to learn a new technology or advanced feature collaboratively in your SIG. Search out and find resources on the web as a group. If you choose to use a technology that has already been presented in this course (e.g. blog, rss, Twitter,e etc.) then you will need to use a plugin or advanced feature that was not covered in labs.

### For example:

Your SIG may choose assistive technologies. As your new technology you could learn how to install a plugin for your blog that allows users to leave an audio voice comment. This would also model the inclusion of an assistive technology on your blog. Often times when we need tech help we have to seek out resources and solutions on our own. For example, we might talk with people who are knowledgeable about the technology, we might search for discussion forums, or locate web sites that would help us troubleshoot an installation problem.

To begin planning, access the SIG Template -

[https://docs.google.com/document/d/17qfDNhECYc3k0caNXvN-6xxRCo9\\_nLSyIDrk1D2jmFY/edit](https://docs.google.com/document/d/17qfDNhECYc3k0caNXvN-6xxRCo9_nLSyIDrk1D2jmFY/edit)



# Michigan State University

Have one member of your group create a copy of the template (by going to File > Make Copy) and then share the GoogleDoc with your group members and your instructors.

In the document you will articulate:

- Your SIG focus. In particular, indicate what focus you will have in each of the 4 common places in education: the teacher, the student, the subject matter, and the context.
- Your members and their special areas of emphasis within your SIG.
- What twitter hashtag will you be using for your SIG.
- The major categories of resources you hope to gather related to your SIG.
- These might include professional organizations, tech help forums, lesson plans, online articles and/or examples
- Outline which technology you have chosen to pursue, the pedagogical reasoning behind choosing this technology and how you will learn and disseminate what you have learned to the class (and the edtech world at large).

## Program:

GoogleDocs

| Rubric Dimension  | Value |
|---|-------|
| <p><b>Effective Use of Technology</b><br/>A group proposal related to your topic using Google Docs that is:</p> <ul style="list-style-type: none"> <li>• Developed as a group (each SIG member contributing something to the proposal). Your instructor will use the Revision History tool within Google Docs to verify participation by all the group members.</li> <li>• Shared with your instructor</li> </ul>   | 5     |
| <p><b>A Thoughtful Description of Your Special Interest Group</b><br/>It should define:</p> <ul style="list-style-type: none"> <li>• your SIG Members &amp; their special areas of emphasis within your SIG.</li> <li>• your SIG focus. In particular, indicate technology, pedagogy, content areas that your SIG targets.</li> <li>• the major categories of resources you hope to gather and create related to your SIG. (These might include professional organizations, tech help forums, lesson plans, online articles and/or examples)</li> <li>• outline which technology you have chosen to pursue, the pedagogical reasoning behind choosing this technology and how you will learn and disseminate what you have learned to the class (and the edtech world at large)</li> <li>• a link to your Annotated List of Resources created in the social bookmarking tool you chose as a group. This is a list resources (online and otherwise) you have identified for your SIG along with your own annotations describing the resources and their contribution to your SIG.</li> <li>• what twitter hashtag will you be using for your SIG.</li> </ul> | 5     |

## Personal Growth Plan (Part 4)

### General Idea

Based on your initial *Personal Growth Plan (Part 1)*, assess your own learning in this class to date. Indicate areas of growth and what supported that growth. Also indicate areas where you would have liked to learn and grow more than you did, along with anything that limited your learning and growth.

- What are some things that you have learned about effective teaching strategies when integrating technology?
- How did integrating the Internet help you think about and evaluate uses of technology?
- Which of the assignments that you turned in do you feel really exemplifies good teaching with technology and why?
- How have you met your goals established in your Personal Growth Plan?
- Do you have any new goals? What are your plans for reaching your new goals and your long-term goals after this course is over?

The grade you receive will be based upon your own assessment as well as your instructor's assessment of your progress in this class.

### Program:

GoogleDocs

| Rubric Dimension  | Value |
|---|-------|
| Each person begins this course with a different set of knowledge, skills, and experiences. This reflection should be a "check-in" of how you are feeling about your progress now that we are half-way through the course. | 20    |

## SIG Annotated List of Resources

### General Idea

For this assignment you will need to tweet a list of resources associated with your SIG. As a group and in your shared Google Doc, you need to identify a list of resources along with your own annotations describing the resources and their contribution to your SIG. You must link to the tweets in your SIG Proposal document.

| Rubric Dimension   | Value |
|--|-------|
| <b>Tweets</b><br>The group should provide annotated links and tweets that you find useful for your SIG. It must be connected by a link to your SIG Proposal. Specifically: <ul style="list-style-type: none"> <li>• Each individual SIG member should contribute resources to the group site.</li> </ul> | 5     |
| <b>Include Key Resources</b><br>Your links represent key resources (on the Web and elsewhere) related to your SIG.   | 5     |

|  |   |
|--|---|
| <p><b>Thoughtful Guide</b><br/>         You provide a thoughtful guide to the findings of your SIG in the google doc, including helping others understand what you find valuable in the resources you include.</p> | 5 |
|--|---|

## Personal Growth Plan (Part 5)

### General Idea

For this assignment you will need to find out your learning style by visiting <http://www.ldpride.net/learningstyles.MI.htm#types%20of%20learning%20styles>

In your Personal Growth Plan, add a section entitled Part 5: My Learning Style. Reflect on your own learning experiences and what types of teaching strategies were more effective to your learning style. What strategies were less effective? We can't teach each lesson focusing on every learning style that we have in the classroom. What should be our focus instead?

### Program:

GoogleDocs

| Rubric Dimension  | Value |
|---|-------|
| Each person begins this course with a different set of knowledge, skills, and experiences. This reflection should thoughtfully reflect what you learned about your own personal learning style. | 20    |

## SIG Presentation

### General Idea

For this assignment you will need to create a presentation “pitching” your SIG and what you learned as a group using publicly viewable presentation tool (Google Presenter, Zoho Show, etc.) You will be sharing this presentation with the class during Session 6. You will want to use the resources you have outlined in your Google Doc, but keep in mind the audience and format for the presentation (audience=classmates, format=online) How do you need to change the content in a creative and compelling way to get your point across to the audience?

### Program:

Presentation Tool (PowerPoint, Google Presenter, Zoho Show, etc.)

| Rubric Dimension  | Value |
|---|-------|
| <p><b>A Publicly Viewable Presentation</b><br/>           A publicly viewable presentation that:</p> <ul style="list-style-type: none"> <li>• "pitches" your SIG (think about this in a way that you are trying to recruit others to join your group)</li> <li>• includes a link to your annotated list of resources</li> </ul> | 20    |

|  |    |
|--|----|
| <ul style="list-style-type: none"> <li>• explains the new technology or advanced feature that you learned together as a group</li> <li>• each group member has participated in the development of</li> </ul> |    |
| <p><b>Thoughtful Creation of the Presentation</b><br/>           You have thoughtfully considered your audience and format for your presentation to creatively get your point across.</p>                    | 10 |

## Personal Growth Plan (Part 7)

### General Idea

Part 7 of your Personal Growth Plan will address how you have effectively integrated the NET-S standards into your educational settings. Provide a lesson plan or activity that effectively addresses at least two of the categories listed below. In your post, be sure to include the following:

1. The lesson or activity.
2. The two categories the lesson or activity falls under.
3. List the specific standards under those categories that the lesson or activity meets.

### Categories

1. Creativity and Innovation (Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.)
2. Communication and Collaboration (Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.)
3. Research and Information Fluency (Students apply digital tools to gather, evaluate, and use information.)
4. Critical Thinking, Problem Solving, and Decision Making (Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.)
5. Digital Citizenship (Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.)
6. Technology Operations and Concepts (Students demonstrate a sound understanding of technology concepts, systems, and operations.)

### Program:

GoogleDocs

| Rubric Dimension  | Value |
|---|-------|
| Each person begins this course with a different set of knowledge, skills, and experiences. This reflection should thoughtfully represent how you have addressed the NET-S standards into your educational settings. | 20    |

## Personal Growth Plan (FINAL)

### General Idea

For your final assignment you will review and revise (based on feedback) your entire Personal Growth Plan document, and ensure that it is a clean document with seven distinct parts (that are labeled and easy to find/understand). This final section of the paper will serve as the capstone for the course, and provide a reflection on your overall personal learning experience throughout the past 8 weeks.

### Final Section

Based on your total *Personal Growth Plan*, assess your own learning in this class. Indicate areas of growth and what supported that growth. Also indicate areas where you would have liked to learn and grow more than you did along with anything that limited your learning and growth. Specifically, for this assignment you are going to reflect on your work and growth during this course as well as make plans for your future goals for integrating technology. When writing your final reflection, you will want to address the following:

- What are some things that you have learned about effective teaching strategies when integrating technology?
- How did integrating the Internet help you think about and evaluate uses of technology?
- Which of the assignments that you turned in do you feel really exemplifies good teaching with technology and why?
- How have you met your goals established in your Personal Growth Plan?
- Do you have any new goals? What are your plans for reaching your new goals and your long-term goals after this course is over?

The grade you receive will be based upon your own assessment as well as your instructor's assessment of your progress in this class.

### Program:

GoogleDocs

| Rubric Dimension   | Value |
|--|-------|
| Each person begins this course with a different set of knowledge, skills, and experiences. You are expected to work and progress consistent with the graduate nature of this course. | 20    |

## Class Participation – First Half (30 points)

### General idea

In this course, you are expected to be an active participant in all class interactions on a timely basis. This grade is intended to give you an early indication of how your participation is going.

# Michigan State University

| Rubric Dimension   | Value |
|--|-------|
| In order to receive full credit participants must: <ul style="list-style-type: none"><li>• Thoughtfully contribute to ALL of the online class discussions</li><li>• Complete all the tasks listed under the Road Map for each session</li><li>• Seek out and provide help among fellow participants</li><li>• Contribute to the general class learning environment</li></ul> | 30    |

## Class Participation – Second Half (30 points)

### General idea

In this course, you are expected to be an active participant in class discussions and interactions. In addition, you are expected to be active in supporting the general class learning environment.

| Rubric Dimension   | Value |
|--|-------|
| In order to receive full credit participants must: <ul style="list-style-type: none"><li>• Thoughtfully contribute to ALL of the online class discussions</li><li>• Complete all the tasks listed under the Road Map for each session</li><li>• Seek out and provide help among fellow participants</li><li>• Contribute to the general class learning environment</li></ul> | 30    |