Proposal for new course
Educational Programs Leadership Council

Course name: Digital Seminar

Course description: Effective use of technology is critical to the acquisition of skills needed in a knowledge-based, twenty-first-century economy. Digital Seminar provides students with:
- access to up-to-date, primary source material on the Internet.
- ways to collaborate with students, teachers and experts around the world.
- opportunities for expressing knowledge and understanding via images sound and text.

Credits: 5

Duration: Semester

Rational for change
In December 2007, the administration from both North and South high schools shared with the Board of Education the outline of a plan for restyling the district's high schools for rigor, relevance and our "millennial" generation.

The administration called this plan "School 2.0" and proposed 10 action steps, one of which was a new course in digital communication, learning and presentation. North Principal Tim Bearden asked teacher Andrew Taylor to develop a curriculum for this course.

- School 2.0 details: northprincipal.blogspot.com/2008/01/grosse-pointe-high-schools-20_30

This is not a "computer" class, but rather an information literacy class that makes extensive use of the most modern technology available to schools.

Objectives used in designing course:
- Train students to create multimedia presentations within a chosen career pathway area.
- Expose students to the expectations and specifics of learning and presenting in their particular field of interest, and also provide the opportunity to learn more about their prospective career path.
- Build around project-based learning.
- Provide the skills for students to maintain a cross-curricular digital portfolio throughout their high school career, leading to a culminating project.
- Treat technology, rather than just a tool, as a way to gather, synthesize and present information.
- Use an online course management system.

How does this fit with the general research on education?
Unspecified.

Proposed timeline
- Two pilot sections at North High School during the 2008-09 school year.
- Expansion at administrative discretion.

Proposed by
- Andrew Taylor, North teacher, English and social studies
- Karen Villegas, North media specialist
- Tim Bearden, North principal
- Al Diver, South Principal

Enrollment
- 40-50 freshmen at North for pilot
- Future enrollment at administrative discretion

Quality standards
The course content will meet the following standards:

- National Educational Technology Standards for Students: The Next Generation: "What students should know and be able to do to learn effectively and live productively in an increasingly digital world."
  - www.iste.org/inhouse/nets/cnets/students/pdf/NETS_for_Students_2007.pdf

- Michigan Merit Curriculum Guidelines: Online Experience
  - State's definition of online learning: 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 meaningful online experience requires a minimum accumulation of 20 hours for students to become proficient in using technology tools to virtually explore content.
  - www.michigan.gov/documents/mde/Online10.06_final_175750_7.pdf

- Michigan Educational Technology Standards (METS) 9-12
  - www.techplan.org/METS9-12.pdf

Resources/technology
The course will make extensive use of technology. Please see attached course outline.

Differentiation
This course is built with the principles of differentiation at its foundation. For example:
- Content
  - Readiness: Assigned readings will be varied and tiered.
  - Interests: Students will narrow general research topics via interest groups.
  - Learning Profile: Small-group instruction will be based on learning profiles.
- Process
  - Readiness: Compacting will be used for students ready for advanced processes.
  - Interests: Group investigation will guide the research process.
  - Learning Profile: Varied resources will include text, audio and video.
- Product
  - Readiness: Learning contracts will be used to customize the products produced.
  - Interests: Independent study will be available for students to innovate products.
  - Learning Profile: There will be varied ways to demonstrate learning.

Costs
Costs for the pilot, beyond the staffing, will be minimal. Some support time from the technology department will be needed as we implement new tools. All anticipated software tools are free. There will not be a textbook.

If the administration implements in the future as a required course, examination of computer lab space and more expansive software tools for a digital portfolio will be needed.

Impact
The impact to the school program will be determined by the administration and whether they choose to pursue this course as an elective or requirement.

CURRICULUM STANDARDS

1.   Creativity and Innovation
▪ METS: Technology productivity tools – 3.A.1-8, 3.B.1

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

     1.1   apply existing knowledge to generate new ideas, products, or processes.
     1.2   create original works as a means of personal or group expression.
     1.3   use models and simulations to explore complex systems and issues.
     1.4   identify trends and forecast possibilities.

‣ Learning experiences:
     a.   Provide authentic experiences through online fieldtrips by bringing the community into the school/classroom
     b.   Participate in an online project where students apply understanding of software applications to simulated or real data
     c.   Participate in ongoing online projects for teachers and students

2. Communication and Collaboration
▪ METS: Technology communication tools – 4.A.1-4, 4.B.1

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. Students:

     2.1   interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.
     2.2   communicate information and ideas effectively to multiple audiences using a variety of media and formats.
     2.3   develop cultural understanding and global awareness by engaging with learners of other cultures.
     2.4   contribute to project teams to produce original works or solve problems.

‣ Learning experiences:
     a.   Provide opportunities for students to interact with other students and experts from around the globe in authentic online learning activities in a controlled environment
     b.   Utilize webquests, blogs, podcasting, webinars, vblogs (videoblogs), Real Simple Syndication(RSS) feeds, or virtual reality simulations
     c.   Utilize an online learning management system that allows ongoing interactive opportunities for students
     d.   Provide an opportunity for interactive discussion with an instructor or expert, such as an author
     e.   Communicate via threaded discussions with other students in and outside of their school
     f.   State-recommended tools: Podcasting, video, online file sharing, graphing calculators, global positioning software, video conferencing, listserves, blogs, e-mail, instant messaging

3. Research and Information Fluency
▪ METS: Technology research tools – 5.A.1-4, 5.B.1, 5.C.1

Students apply digital tools to gather, evaluate, and use information. Students:

     3.1   plan strategies to guide inquiry.
     3.2   locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
     3.3   evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
     3.4   process data and report results.

‣ Learning experiences:
     a.   Use technology tools for online research or online projects
     b.   Determine the value and reliability of content collected on websites and other online resources

4. Critical Thinking, Problem-Solving & Decision-Making
▪ METS: Technology problem solving and decision-making tools – 6.A.1, 6.A.2, 6.A.1
Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:
- 4.1 identify and define authentic problems and significant questions for investigation.
- 4.2 plan and manage activities to develop a solution or complete a project.
- 4.3 collect and analyze data to identify solutions and/or make informed decisions.
- 4.4 use multiple processes and diverse perspectives to explore alternative solutions.
‣ Learning experiences:
- a. Provide teacher-led, student-directed online learning activities such as test preparation tools and career planning resources
- b. Develop and track an electronic portfolio (organized collection of completed materials)

5. Digital Citizenship
▪ METS: Social, ethical, and human issues – 2.A.1-4, 2.B.1-6, 2.C.1-2
Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:
- 5.1 advocate and practice safe, legal, and responsible use of information and technology.
- 5.2 exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- 5.3 demonstrate personal responsibility for lifelong learning.
- 5.4 exhibit leadership for digital citizenship.

6. Technology Operations and Concepts
▪ METS: Basic operations and concepts – 1.A.1-6, 1.B.1-7
Students demonstrate a sound understanding of technology concepts, systems and operations. Students:
- 6.1 understand and use technology systems.
- 6.2 select and use applications effectively and productively.
- 6.3 troubleshoot systems and applications
- 6.4 transfer current knowledge to learning of new technologies.

	Standard	Topics	Tools	Readings
1	Orientation	▶ Team building (1-2 days) ▶ Content management system (CMS) introduction (1)	▶ Moodle	
2	Creativity and Innovation	▶ Monday meeting: What is Web 2.0? ▶ RSS: Real Simple Syndication (3) ▶ Karen's video (1)	▶ RSS reader	▶ Meet the Whiz Kids: 10 Overachievers Under 21 (ABC News) ▶ The World is Flat (excerpt)
3		▶ Monday meeting: What is Web 2.0?, part 2 ▶ Online field trips (2) ▶ Wiki (2)	▶ Wiki program	▶ Wikinomics: How Mass Collaboration Changes Everything (chapter 1)
4	Communication and Collaboration	▶ Monday meeting: ▶ Personal blogging (2) ▶ Google documents (2)	▶ Blogging program ▶ Google documents	▶ Distinction Between Bloggers, Journalists Blurring More Than Ever (PBS)
5		▶ Monday meeting: ▶ Discussion boards (1) ▶ Virtual guest speaker (1) ▶ Formative assessment (2)	▶ Moodle ▶ Skype?	▶ Hello, India? I Need Help With My Math (NY Times)
6		▶ Monday meeting: Digital storytelling □ Podcasting ▶ Create digital story of self (4)	▶ Photostory 3 ▶ Digital camera ▶ Scanner	

7	Digital Citizenship	▶ Monday meeting:
		    □ Growing Up Online (PBS) video and activities
		      ▪ Digital safety
		      ▪ Digital security
				▶

8		▶ Monday meeting:
		    □ Piracy
		    □ Copyright
		    □ Etiquette		

	Standard	Topics	Tools	Readings

9		▶ Monday meeting: Who needs libraries anymore?
		    □ Mom, what was it like before Google?
		    □ Social bookmarking/tagging
			▶ Information databases	▶ Revenge of the Experts (Newsweek)
				▶ Searching for the Best Engine (Newsweek)

10	Research and Information Literacy	▶ Monday meeting: □ Bibliographies		
11		▶ Monday meeting: ▶ Formative assessment: Product evaluation and review □ Which digital camera should your mom buy?	▶ PowerPoint ▶ Excel ▶ Internet research	

12		▶ Project based learning: Research topics
		    □ Globalization: What skills and traits will I need to be successful in a global job market.
		    □ Global warming
		    □ Video gaming
		    □ Forensic science
		    □ School of the future
			▶ Photostory 3
			▶ Moviemaker
			▶ Blogging site
			▶ Wiki site
				▶ The Long Tail (excerpt)
				▶ Free! Why $0.00 Is the Future of Business (Wired)

13		▶ Team roles
		    □ Everyone's job
		        ▪ Blog: Reflective on own learning with responses from parents, National Honors Society mentor, team members, teacher		

14	Critical Thinking, Problem Solving & Decision Making	▪ Report to project manager each week on progress		

15		□ **Project manager:** Posts official weekly report to team blog
		    □ **Editor:** Approves all text for all roles
		    □ **Digital story:** Overview of topic and process for whole team		

16		□ **Wiki master:** Maintains style and format for items submitted by team
		    □ **Text-based:**
		    □ **Web page:**
		▶ **Digital Portfolio:** Taking these skills beyond the		

	Standard	Topics	Tools	Readings
17		classroom		
18	Presentations	▶ Group presentations (5) 　　□　30 minutes per group, per day 　　□　To another class, to parents, to NHS mentor		
Exams week	Final Exam			