IST 666: Creating Innovators: The Maker Movement

Welcome

My name is Shannon Mersand and I am a School Media Specialist in Northern Westchester County. I have over 13 years experience in school and public libraries, and present regularly at local and state level conferences on a variety of topics, including designing learning spaces for student engagement and success. I have created several unique learning opportunities for my students, including a student run tech support center, with a focus on Google Apps for EDU training, and a Maker Space that is utilized by individuals, groups and whole classes.

The Maker Movement is sweeping the globe, and libraries, librarians, and teachers are leading the way to revitalizing innovation. This course is designed to help you incorporate the Maker mindset into your work, be it in a classroom, school library media center, public library, university library, or other public space. Many of the assignments you will do ask you to think pedagogically about maker activities. Even if you are not in a school, understanding how the maker mindset matches with educational theory will help you design experiences for your patrons.

In this course, our job is to explore making and the maker culture, and find a way to incorporate it into our work!

Contact Info

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Cell: 518-965-8080 (texts welcome, please identify yourself)
Email: smersand@albany.edu
Twitter: @ShannonMersand
Skype: BookFaeri
Google Hangouts: ShannonMersand
Restrictions: Please restrict your phone calls to the hours of 6PM to 9PM Eastern Standard Time Monday-Friday. I do work full time in a school, and will not answer the phone outside of those hours. If it is an emergency, please leave a message.
Logon Schedule: daily in the evenings

Overview

Designed for PreK-12 educators, school library media specialists, teacher librarians, classroom teachers, STEM educators, tech integrationists, and educational technology teachers, and public librarians who want to create “making” environments in traditional classrooms, school library/media centers and community spaces such as public libraries.
The focus is on teaching the basics of design through hands-on, learning by doing. The theories and practices covered in this course can also be applied in public and university library settings. The course is designed for participants to collaborate and co-create knowledge with opportunities to create making experiences. Learn evidence-based strategies that support building models, prototypes, inventions and innovations and encourage creative problem solving and team collaboration across a wide range of subject matters and all grade levels. Applications of learning theory and assessment strategies will be employed to create interdisciplinary inquiry-based maker experiences.

**Course Objectives**

Upon completion of this course, you will be able to:

2. Research and distinguish between hands-on, inquiry-based learning and traditional instructional design and teaching strategies.
3. Examine the relationship between inquiry-based maker experiences and academic disciplines.
4. Analyze and identify opportunities, barriers, options and alternatives to incorporate the maker mindset.
5. Establish a process-driven curriculum based on student interest that is adaptable at a variety of grade levels.
6. Evaluate examples of maker projects to determine appropriateness for curriculum across grade levels and disciplines, as well as meeting the needs of a diverse group of learners.
7. Evaluate, select, utilize and apply materials and technologies with the maximum learning impact to encourage interdisciplinary creative problem solving when designing functional prototype projects.
8. Examine the roles of the teacher and librarians as collaborators and leaders in the maker movement.
9. Utilize online social platforms that assist learners in finding, joining, and interacting with their own personal learning communities including other students and professionals, both within and outside of their building.
10. Analyze and demonstrate appropriate teaching behaviors that support student reflection about an open-ended process, failure as part of the process, resourcefulness, and sharing work with others.
11. Apply learning theories that support making ideals when designing learning activities.
12. Align instructional goals with flexible and customizable curricula and differentiate the appropriate and inappropriate use of assessment of inquiry-based learning projects.
13. Synthesize the principles of learning-by-making with teaching strategies, instructional technology, and effective authentic, ongoing and continuous feedback and summative assessments.

Readings and Required Materials


Additional web-based readings, virtual field trips, and videos will be available within the course.

You should have access to a computer with high speed internet access throughout this course. You will not be able to complete this course using only a tablet computer or cell phone. You should work in Google Chrome or Mozilla Firefox for optimal experience with Blackboard.

You will be participating in several “making” experiences which may require you to purchase craft type materials. It is also recommended that you have access to a digital camera and a video camera for some assignments. A cell phone or tablet computer may be used for this.

Course Learning Activities
Each module is structured around an introduction, readings, activities, and online discussion. You will work individually and as a member of collaborative teams to share and refine your key learning. The types of activities you will participate in include discussions, resource shares, reflections and maker style projects. You have freedom of expression for any assignment in this course (see alternative to written work below).

Alternatives to written work
In this course you are encouraged to express your thoughts using visual or audio representation. You may use an InfoGraphic, short video, presentation, audio or any of other format you think will effectively communicate the assignment activity. Review the rubrics and remember to include and cite the resource/reference/text/author. A full transcript is not required for videos or audio files, but typically listeners or viewers like some text to fall back on. (And if we have someone with a hearing impairment, we will need to transcribe.) Also note that it takes longer to listen than to read.
For your convenience, all links to the sites listed below will open in a new tab on your browser. This will allow you to bookmark, print, cite pages, etc. To return to this page, simply close the new tab.

Some tools you may wish to explore:

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<thead>
<tr>
<th>Infographics</th>
<th>Animations</th>
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<tr>
<td><a href="https://infogr.am/">https://infogr.am/</a></td>
<td><a href="http://wideo.co/">http://wideo.co/</a></td>
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<tr>
<th>Comics</th>
<th>Audio Recording</th>
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How you will be Evaluated

Your final grade will be based on:

- 30% - Online Discussion
- 30% - Module Activities (Resource Shares, Group Projects, etc.)
- 20% - Final Project
- 20% - Self-reflection

Your projects will be evaluated using criteria listed on the module rubrics or checklists. Evaluation of your discussion participation is cumulative and subjective based on the course discussion rubric and notes that the instructor records each week. E-mail your facilitator for help in upgrading your participation in the class discussion.

Reflections will be evaluated for clarity and your understanding of the readings and activities.

Any time you want progress feedback, please check the online gradebook and send a message directly to your facilitator.

Grading Scale

A = 94-100 %
A- = 91-93
B+ = 88-90
B = 84-87
B- = 81-83
C+ = 78-80
C = 74-77
Work below 74% is unacceptable at the graduate-level and will result in a grade of F.

**Grades and Instructor Feedback**
At the end of each module, check the grade and comments provided in the Grades to view personalized feedback from the instructor.

**Rubrics**
Please see the rubrics posted in the course.

**My Expectations**

**Logging In**
You are expected to log into the course a minimum of 3 times per week to view assignments, participate in discussions and check course announcements. You should also check your UAlbany email at minimum 3 times per week (though daily is better) for important communications from me.

**Course Discussion Board**
Many of the course activities will occur in the Discussion Board, so it is important that you check it regularly. You will also submit selected assignments to the Discussion Board.

Perhaps its most vital use, however, is the exchange of ideas that can occur among class participants. You will be able to communicate with everyone in the class through your postings to the Discussion Board. Communicate with each other frequently and freely.

**Discussions Expectations**

- Log in early, log in often. Be sure to post your initial response to the forum early in the week. Log in at least 3 other times during the week to read your peers’ posts and respond to them. Respond to at least two of your classmates.
- Give your responses a title which entices your peers to read them.
- Be sure you read and understand the prompt. Follow ALL directions in the discussion prompt. Your post will consist of more than simply stating, “I don’t know anything about this topic.” It will be substantive and will include at least one source of information other than your own knowledge. (This could be quotes from the book you are reading or information from an article related to the topic).
- Be sure to respond to those who respond to you when appropriate.
- Avoid “Me too!” and “I agree” posts. These do not count as responses in your grade. (See “Response Techniques” for ideas)
- Avoid doing all of your posting at the end of the week, as you miss out on the interaction.
When you respond to peers, use these Response Techniques

- Ask an open-ended, but related, new question about the material (something that requires more than a yes or no response)
- Ask for clarification of something in your peer’s post (Was there something you did not understand something? Was something unclear?)
- Play devil’s advocate - Disagree with an idea your peer has, back it up with evidence from class materials or an outside source (remember, disagree with the idea, not the person)
- If you agree, give an example from your own life or an outside source that further backs up your peer’s argument
- If you agree, provide another article or website that further expands on your peers ideas
- Sum up what you have read so far in the discussion board, making connections between different student’s posts that relate

Citations

No more than 10% of a discussion posting or paper may be directly quoted. How to document direct quotations in a discussion posting or paper using APA citations: http://owl.english.purdue.edu/owl/resource/560/02/

See: "short quotations" and "long quotations" and "summary or paraphrase."

Other Expectations

As each activity is completed, share your discoveries and successes with other participants and collaborate during team problem-solving. Participants will share drafts of works-in-progress for peer feedback and discuss ideas and suggestions before submitting the final project.

Each participant brings unique needs and resources to the group. Our sharing will provide a broader base of experience as we discover the solutions to each other’s design needs and challenges.

Accommodations

If you believe the course requirements create a conflict with your observance of religious holidays, please notify the instructor within the first two weeks of the semester so that appropriate alternative options can be arranged.

If you have a disability or health condition that may require special accommodation, please notify the instructor within the first two weeks of the semester so that appropriate options can be discussed.

Academic Honesty

Academic dishonesty is unacceptable. Academic dishonesty includes cheating (intentionally using, or attempting to use, unauthorized materials, information, or study
aides in any academic exercise); fabrication (intentional and unauthorized falsification or invention of any information or citation in an academic exercise); and plagiarism (intentionally or knowingly representing the words or ideas of another as your own in any academic exercise). Plagiarism is considered a form of theft and is considered a serious violation.

From the University website:

Presenting as one’s own work the work of another person (for example, the words, ideas, information, data, evidence, organizing principles, or style of presentation of someone else)… Plagiarism includes paraphrasing or summarizing without acknowledgment, submission of another student’s work as one’s own, the purchase of prepared research or completed papers or projects, and the unacknowledged use of research sources gathered by someone else. Failure to indicate accurately the extent and precise nature of one’s reliance on other sources is also a form of plagiarism. The student is responsible for understanding the legitimate use of sources, the appropriate ways of acknowledging academic, scholarly, or creative indebtedness, and the consequences for violating University regulations.

More information can be found here:

http://www.albany.edu/graduatebulletin/requirements_degree.htm#academic_standards

More information on Plagiarism can be found here. On this note, I do want to let you know that I take academic honesty seriously and that if you are found to be engaging in dishonest behaviors you will be reported to the University and will receive, at a minimum, a failing grade for the assignment or exam. Severe cases will result in a failing grade for the course and possible expulsion from the University. In addition, it is your responsibility to inform the instructor if you know of any situations where academic dishonesty is taking place.

If you have questions about citation, the following links provide information you might find helpful:

Rutgers University: This site has videos you can watch to learn about plagiarism and how to avoid it. It includes an interactive activity on citation:
http://library.camden.rutgers.edu/EducationalModule/Plagiarism/whatisplagiarism.html

Purdue: How to document direct quotations in a discussion posting or paper using APA citations: http://owl.english.purdue.edu/owl/resource/560/02/ (See: "short quotations" and "long quotations" and "summary or paraphrase.")

Late Policy

Regular, timely feedback to classmates via the discussion board makes this class vital, and prompt submission of assignments for assessment allows the instructor to give you
the guidance you deserve to receive. Due dates for each module are published on the course calendar at the start of the class. Work turned in by midnight on the due date will be considered on time and will receive full credit.

Life can bring emergencies which may prevent timely submission of assignments. If you have an emergency which interferes with your coursework contact the instructor as soon as possible. Emergencies are defined as serious events which are not planned. Emergencies cannot be written on the calendar in advance. Examples of emergencies are heart attacks, car accidents, serious health crises of the student or in the student's immediate family. Examples of non-emergencies are family weddings, vacations, or any other event which can be planned around. If the family calendar looks busy at a particular time, plan to work ahead on your coursework.

**Excused Makeup Work** - If the late submission has been requested and approved in advance of the due date, there will be no deduction of points from the grade. An email to the instructor requesting an extension of the due date must be sent. The instructor will inform you if late submission will be allowed.

Unless previously excused by the instructor, work that is submitted after the close of a module will be penalized 10% per day. In other words, you need to be on time to earn 100%. There are only seven days to submit late work. Late work will not be accepted after one week unless previously approved by the instructor.

Please contact the instructor if you have any questions about the late policy.

**Course Schedule**

No travel to campus is required. Because this class is asynchronous and open to you 24/7, you may participate from your home or work computer during hours that are best for your work and family schedule.

The class is highly interactive with a significant discussion component. All discussion postings, projects, and assignments will be submitted via the course discussion board and Dropbox no later than MIDNIGHT on the day they are due. Activities are conducted according to a schedule with specific due dates each week.

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<thead>
<tr>
<th>Module Name</th>
<th>Start</th>
<th>End</th>
<th>What to expect</th>
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<tbody>
<tr>
<td>Course Information</td>
<td>Week 1 Jan 20</td>
<td>Week 1 Jan 26</td>
<td>Course Expectations</td>
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</table>
Netiquette

Netiquette Please observe proper "netiquette" -- courteous and appropriate forms of communication and interaction over the Internet (within your online course). This means no personal attacks, obscene language, or intolerant expression. All viewpoints should be respected. For more information about Netiquette feel free to visit the following site: http://www.albion.com/netiquette/corerules.html

NOTE: The instructor of this course reserves the right to remove any questionable or offensive material from public areas of this course.

Getting Technical Help

If you experience technical problems that interrupt your ability to complete class work, it’s important that you know where to seek help immediately. Here is a simple guide for where you should direct questions and calls for help.

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<tr>
<th>Problems with…</th>
<th>Who you should contact…</th>
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<tr>
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<tr>
<td>Login to your ISP (Internet Service Provider); connecting to websites; launching web browser software (Internet Explorer, Firefox).</td>
<td>Your ISP (Internet Service Provider)</td>
</tr>
<tr>
<td>Connecting to the UAlbany BLS website; login to BLS website and accessing your course(s); interacting or participating in course activities, submission of assignment or file attachments in course.</td>
<td>The ITS Help Desk • go to the ITS Help Request Form (<a href="http://www.albany.edu/its/help">http://www.albany.edu/its/help</a>) • call (518)442-3700</td>
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Please note that your instructor is not on this list. If you send inquiries to me about these technical problems, I will refer you to the resources listed.

**YOUR NEXT STEPS....**

Please proceed to the Ice Breaker Module, where you will participate in an introductory discussion, take the Syllabus Quiz and practice uploading an assignment to the Dropbox. Click on the Course Modules link (on the toolbar on the left) to access the module.