Instructional Fair Booklet

Teaching and learning strategies presented by Oakland University Faculty

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Classroom Strategies

Online Teaching Strategies

Tech Tool Strategies
# Table of Contents

Comics and Content [Greg Allar] ................................................................................. 3  
Alternate Applications to Assess Learning [Greg Allar] ........................................... 4  
Experiential Learning [Rachel Smydra] .................................................................. 5  
Instructional Design for Motivation [Misa Mi] .......................................................... 7  
Using Simulation to Engage Learning: PostOperative Surgical Bleed  
[Lynda Poly-Droulard] ............................................................................................ 11  
Videotaping Your Class to Help Students Learn [Laura Dinsmoor] ....................... 14  
The Wiki Way: Fostering Online Reflection and Collaboration  
[Stephen Loftus] ...................................................................................................... 16  
An Outcome-Driven Online Graduate Course: Real Time Systems Course  
[Subramaniam Ganesan] .......................................................................................... 17  
CyberCourse: Improving Skills Courses [Kieran Mathieson] .................................. 20  
Extra Credit That Can Save Your Life:  
Creating an Emergency Preparedness Kit [Kathleen Walsh Spencer] ................. 22  
“ShowMe” Tutorials [Kathleen Doyle] ...................................................................... 25  
Library Course Pages [Beth Kraemer] .................................................................... 28  
Library Tutorials [Beth Kraemer] ............................................................................. 29  
Library Widget for Moodle [Mariela Hristova] ....................................................... 30  
Libraries Copyright Course – *Copyright and You* [Julia Rodriguez] ....................... 31  
Libraries Plagiarism Course – *Using and Citing Sources* [Julia Rodriguez] ......... 33
Comics and Content

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Type of Strategy: In-class active learning

Purpose of Strategy: To interpret the intent of the cartoonist/satirist by creating a meaningful caption.

Type of Course: Undergraduate/Honors College/Online

Name of Course: HC 205 Defining the New Russia and PS 337 Post Soviet Politics

Typical Number of Students in Course: 20-25 though immaterial

Ease in which strategy could be modified and/or applied to other courses: Easy

Brief Overview of Strategy

Select comics related to topic under discussion in class and remove the caption. Students create their own caption. Instructors can use Moodle and create a Q & A Forum to post the cartoons. Once students finish the class can review all of the captions and judge for relevance, select the most appropriate response, etc. This is a fun activity.
Alternate Applications to Assess Learning

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Type of Strategy: Assessment

Purpose of Strategy: To provide examples of alternate methods for assessing well-structured and ill-structured problems.

Examples of ill-structured problems:
- What would it take to solve poverty?
- What is the proper balance between conservation and consumption of energy (oil or gas)?
- Who owns the Arctic?
- Can the war on terrorism be won?

Type of Course: Undergraduate/Honors College

Name of Course: HC 205 The Global Citizen and PS 337 Post Soviet Politics

Typical Number of Students in Course: 20-25

Ease in which strategy could be modified and/or applied to other courses: Moderate

Brief Overview of Strategy

“If you want your students to learn to solve different kinds of problems, you must learn to teach them to solve different problems and then assess their different abilities to solve the kinds of problems that they practiced” (Jonassen, 2014).

Resources, Citations, References for Strategy:


Experiential Learning

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Course Name English 200: Making Literary Connections

Type of Strategy Off-campus Learning Activity

Type of Course Undergraduate

Total Number of Students 20-25

Application/Modification Level Medium

Purposes/Outcomes

- Facilitates critical thinking, reflection, and application of course materials.
- Fulfills need for an organization and engages students to meet community needs.
- Builds communities between students and community partners.
- Prepares students to contribute as citizens in local communities.

General Overview: Community Engagement/Service Learning involves choosing a community partner to facilitate a class project. Any course can offer this type of experiential learning with careful planning and effective implementation. Creating a program with obtainable, focused goals and objectives for everyone involved helps create an enriching opportunity for students and participants to learn, interact, and reflect on course materials.

English 200 Overview: My project involved student-lead weekly book club sessions at Grace Centers of Hope in Pontiac, Michigan. My goals with this project were to have my students introduce literature to Grace Centers of Hope Program Residents and to offer them a vehicle to extend discussions to reflect on life choices. For OU students, my goals were to create a situation that offered them the opportunity for active learning and to evaluate what they know and think about literature, the homeless, and connections to their communities. My objectives on completion of the interactions were for OU students and Grace participants to walk away with a lifelong appreciation for literature as a vehicle for fueling discussions about aesthetic and critical thinking components. I also wanted students to leave class with a sense of community and their responsibilities to connecting with diverse groups of people.

Students were required to lead one session and attend another at Grace Centers of Hope. After a general session overview, an OU group leader led a focused discussion by posing questions and fostering a discussion to allow group members to offer their own interpretations of short stories in addition to connections to life choices.
In their post-experience reflections, many students produced publishable papers (OU Journal/Penn State Berks Undergraduate Journal of Service Learning and Community-Based Research) and will be meeting over the course of the next few months as a writing community to edit materials. Grace Center of Hope participants decided to continue the book club on their own, so OU students designed materials to organize and facilitate discussion. As a result of our project, two Grace students signed up for college courses.

**Step-by-Step Instructions**

1) Find a community partner (see additional comments) to design a program that fits your and your partner’s needs.

2) Off-campus meetings should take the time of class-time so best to send students in groups. A Bear Bus is available to rent; this provides a great way to move a large group and to avoid problems with parking and safety issues.

3) Discuss activity and expectations thoroughly with partner and students prior to activities. Role-play and trouble-shoot. Prior to activities, it is best to have students sign a Traveler Hold Harmless and Indemnity Agreement.

4) Best for instructor to attend sections to monitor and facilitate sessions; creates a shared experience.

5) Evaluate and accept feedback from students, participants, and community partner liaison and adapt materials/interaction as necessary throughout the activity.

6) Sessions should end with a reflection project (paper, blog, poster, etc...) that allows students to make connections between materials and experience.

**Additional Comments:** Logistical planning is essential to project success, so start planning early. Several partners in local communities are open to building relationships with OU. A brief list is below.

Grace Centers for Hope
Above and Beyond
Pontiac Downtown Business Association
Circle K
Baldwin Center
Global Brigades
Haven
Mission: Kindness
Habitat for Humanity
Rebuilding Together

Beyond Basics
She’s the First
Lighthouse of Oakland County
The Big Read
Children’s Charity Coalition
American Red Cross
Rochester Neighborhood House
Salvation Army
FISH (Lake Orion/Oxford)

**Resources:** Michigan Campus Compact, Service Learning Clearing House, National Coalition for Academic Service Learning
Instructional Design for Motivation

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Type of Strategy: In-class active learning and online active learning

Purpose of Strategy: Instructional strategies used to design instruction to create learning conditions for motivating and engaging learners.

Type of Course: Can be applied to design course instruction for learners in k-12 in F2F, online, and hybrid environments.

Name of Course: Capstone, Integrative Evidence-Based Medicine

Typical Number of Students in Course: Individual, small, and large groups

Ease in which strategy could be modified and/or applied to other courses: Easy

Brief Overview of Strategy: Strategies based on Kelly’s model of motivation design. The model is a systematic process for and heuristic approach to designing instruction to motivate learners.

Step-by-Step Instructions of Strategy

1. Attention strategies for arousing and sustaining curiosity and interest
   - Capture Interest (Perceptual Arousal): What can I do to capture learners’ interest?
     Strategies: using novel or unexpected approaches to instruction or injecting personal experiences and humor
   - Stimulate Inquiry (Inquiry Arousal): How can I stimulate an attitude of inquiry?
     Strategies: stimulating curiosity by posting questions or problems to solve
   - Maintain Attention (Variability): How can I use a variety of tactics to maintain learners’ attention?
     Strategies: incorporating a range of methods and different forms of media to meet students’ varying needs, or varying an instructional presentation

2. Relevance strategies that link to learners’ needs, interests and motives
   - Relate to Goals (Goal Orientation): How can I best meet learners’ needs? (Do I know their needs?)
     Strategies: providing statements of utility along with the goals and objectives of instruction, or helping learner to define their own goals and statements of utility
Match Interests (Motive Matching): How and when can I provide learners with appropriate choices, responsibilities, and influences?

**Strategies:** matching objectives to student needs and motives

**Tie to Experiences (Familiarity):** How can I tie the instruction to learners’ experiences?

**Strategies:** relating instruction to learners’ experiences and values by providing concrete examples and analogies

3. Confidence strategies that help students develop a positive expectation for successful achievement

**Success Expectations (Learning Requirements):** How can I assist in building a positive expectation for success?

**Strategies:** informing students about learning and performance requirements and assessment criteria

**Success Opportunities (Learning Activities):** How will the learning experience support or enhance learners’ beliefs in their competence?

**Strategies:** providing challenging and meaningful opportunities for successful learning

**Personal Responsibility (Success Attributions):** How will learners clearly know their success is based upon their efforts and abilities?

**Strategies:** linking learning success to students’ personal effort and ability

4. Satisfaction strategies that provide extrinsic and intrinsic reinforcement for effort

**Intrinsic Satisfaction (Self-Reinforcement):** How can I provide meaningful opportunities for learners to use their newly acquired knowledge and skills?

**Strategies:** encouraging and supporting intrinsic enjoyment of the learning experience

**Rewarding Outcomes (Extrinsic Rewards):** What will provide reinforcement to learners’ success?

**Strategies:** providing positive reinforcement and motivational feedback

**Fair Treatment (Equity):** How can I assist learners in anchoring a positive feeling about their accomplishments?

**Strategies:** maintaining consistent standards and consequences for success throughout a course or training experience

**Additional Comments:** The motivational design strategies can be used to design instruction to improve the motivational quality of any face-to-face classroom or online teaching. They can also be modified to create evaluation criterions to evaluate web-based learning resources.

**References:**


Mom 2 Mom Thesis Swap and Sale

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Type of Strategy: in-class activity

Purpose, Goal(s) or Learning Outcome(s) for Strategy: The goal of this strategy is to get students to engage in their writing from a reader centered approach. It also places emphasis on the thesis statement, which is a problem area for many students.

Type of Course: on-ground or online/hybrid

Name of Course: WRT 150 and WRT 160

Typical Number of Students in Course: 22

Ease in which strategy could be modified and/or applied to other courses: Moderate

Brief Overview of Strategy: Students form small groups and have to “sell” their topics to each other. Once they “own” a new topic, they must write a potential thesis for that topic. This keeps the writing reader centered. It works like a preliminary peer editing.

Step-by-Step Instructions of Strategy

1. Break class into small groups (4 works best, but it can be done with 3-5).
2. Have them choose a number one through four.
3. Number one begins by explaining his or her essay topic to the group
4. The other three group members then have to “own” the topic and treat it as if it were his or her own.
5. The three group members have to write a thesis statement for that topic. I usually give them about two minutes.
6. Then, number two presents his or her topic.
7. The remaining group members do the same. Repeat until every person in the small group has three potential thesis statements for his or her topic.
8. This usually takes about ten minutes. Fifteen tops.
9. Group the class back as a whole.
10. Have each person “sell” the topic to the class; however, those in the original group cannot “buy” it.
11. Every topic has to be “sold” and “purchased” and each potential buyer may ask questions about the topic.
12. Once purchased, that individual must write a potential thesis statement for the original “owner.”
13. Give to the original “owner” at the end of class.

Additional Comments: This gives the students an experience with an informal/brief presentation, AND it gives the students one more potential thesis statement. An additional bonus is the interaction among peers in the class. The activity usually takes about a half hour to thirty-five minutes. It may take longer if you have a particularly chatty group that asks questions. Leave forty-five in your lesson plan. I usually combine this with a brainstorming activity or a short writing in class. I have also put a “for sale” sign on the board. It freaks out the students when they walk in the room. Again, side bonus.
Using Simulation to Engage Learning: Postoperative Surgical Bleed

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Type of Strategy: Active Learning

Purpose, Goal(s), or Learning Outcomes for Strategy: The purpose of this program is to enhance the understanding of perioperative nursing to nursing students in a real world environment and bridge the transition from student nurses to registered nurse in the operating room; supporting a nurse residency program before graduation.

Type of Course: Undergraduate

Name of Course: NRS 360: Perioperative Nursing Didactic Content

Typical number of students in course: 10

Ease in which strategy could be modified and/or applied to other course: Easy

Brief Overview of Strategy: An innovative, perioperative program that incorporates simulation and flipped classroom course is offered to senior nursing students in collaboration with area hospitals. Due the shortage of nurses in the Perioperative Area, especially the Operating Room, there is a need to hire new graduates (not traditionally done in the past). We have aligned the curriculum with the needs of the institution in hopes to decrease orientation time (6 to 12 months long). The simulation is focused on a post-operative patient who has internal bleeding resulting from surgery. Simulation has rarely used in perioperative training. Students will gain confidence in patient care during a simulated experience in a safe and non-threatening environment. Students are expected to display evidence of critical thinking, decision-making, prioritization, organization, problem solving, accurate physical assessment and clinical judgment to carry out the assigned objectives of the simulated experience.

Step-by-Step Instruction of Strategy

1. Students will be given perioperative materials to read prior to the simulation experience. Power Point slides will also be provided (flipped classroom) related to care of the surgical patient (abdominal surgery) and assessment/evaluation of postoperative complications.
2. On the day of the simulation, students will be provided information regarding the patient that nurses’ would normally find in a patient chart.
3. Students will complete a pretest regarding information related to the postoperative diagnosis and care of a postoperative bleeding patient.

4. Formalized report is given to the students from the OR nurse to the unit nurse. The SBAR (situation, background, assessment and recommendation) method of communication, which enables nurses to communicate clearly to each other regarding patient’s condition and needs, will be reviewed.

5. The simulation will begin with students caring for a patient (a high fidelity simulation mannequin) whose condition deteriorates.

6. Groups of 3 students are expected to work as a team to care for a postoperative patient who is bleeding; each student has an assigned role.
   a. Student #1 will be the team leader and is responsible for collecting assessment data and calling the physician.
   b. Student #2 completes the patient’s physical assessment.
   c. Student #3 is responsible for assessing the patient’s IV lines, vital signs and surgical dressing.

7. As students assess their simulated patient, the simulator will tell the students she is feeling lightheaded and “funny.”
   a. As the patient continues to complain of feeling dizzy and lightheaded, the vital signs and other important monitoring signs will begin to change.
   b. The students will then need to determine why the patient is lightheaded through the proper assessment techniques that they learned through their assigned readings.
   c. There are several specific assessment areas that need to be identified such as the patient’s oxygen is not connected to the oxygen wall outlet, the patient’s dressing is saturated with blood and the wrong IV solution is hanging.

8. Students will be expected to call the surgeon on the phone to discuss concerns and receive orders using the SBAR communication model.

9. Students will implement orders.

10. If students do not determine the correct course of action, the patient’s condition will continue to deteriorate.

11. Students will formulate a correct diagnosis and action plan to prevent patient from continued deterioration and implement corrective actions and care.

12. At the end of the simulation, students will group with faculty for a debriefing session. During the debriefing, dialogue will take place among the participants regarding their interpretation of the experience and what they felt they learned from the simulation. We also discuss critical thinking skills, best actions to be taken first and overall performance of the group during an emergency situation. Debriefing is conducted in a nonthreatening manner.

Additional Comments:

- Pedagogical strategies to empower students to learn.
• The Institute of Medicine (IOM) has identified patient safety, teamwork and collaboration, and informatics as 3 of the 6 competencies of quality and safety education for nurses [QSEN] (Cronenwett, et al, 2007). Hence, educating student nurses in practices that promote safety and effective patient care in perioperative care is essential. Subtle and rapid changes in the post-operative patient are not uncommon and thus accurate physical assessment skills are imperative. The nurse is a key member of the health care team who must be able to rapidly identify a patient’s changing health status and communicate effectively to the surgeon and anesthesiologist in order to facilitate positive patient outcomes. The use of simulation has been strongly supported as an effective teaching/learning strategy to promote safe patient care, critical thinking, psychomotor skills, and sound decision-making resulting in decrease errors. A positive relationship between patient safety and effective teamwork has been demonstrated at the point of care via the use of high-fidelity simulation training. The use of high-fidelity simulation also meets the needs of using technology within the nursing curriculum in a highly effective manner. Students must learn how to use the high-fidelity simulator and computerized equipment. Thus, the program effectively addresses patient safety, teamwork and collaboration, and informatics as primary competencies stated by IOM.

• The proposed simulation will empower students to become the responsible for learning content and then actually applying that information to an almost live situation. They will begin to understand the link between nursing knowledge for the perioperative nurse and application to a post-operative patient’s complication.

References


Messina, B., Iannicello, J., & Escallier, L. (2011). Opening the doors to the OR: providing students with perioperative clinical experiences. AORN, 94(2), 180-188.


Videotaping Your Class to Help Students Learn

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Type of Strategy: Tech Tool Strategies

Purpose of Strategy:

Use the lecture capture tool Panopto with a classroom PC, or your own laptop, to record your lecture for your students. You can record audio only, PowerPoint only, capture the PC screen, use a camera, or use any combination of these. The students appreciate and use these videos for reviewing material covered in class, verify information discussed too quickly, view classes missed, or prepare for exams.

Videos do not need to be edited before posting. Even without editing my videos, students frequently state how much the videos have helped them and wished all their professors captured lectures with video.

Recording your lectures may be especially useful for Disability Support Students (“DSS”) students, English as a Second Language (“ESL”) students, and students who miss class due to illness, sports, business, etc.

Type of Course: Lecture classes

Name of Course that strategy is being implemented into: CSE/CIT 120, CSE/CIT 130, CIT 131

Typical Number of Students in Course: 20-40 students

Ease in which strategy could be modified and/or applied to other courses: Easy

Brief Overview of Strategy: Request the free Panopto software be installed on the classroom PC. It can also be installed on your laptop. When you record your lecture, it is automatically uploaded to your Moodle page.

Step-by-Step Instructions of Strategy

1. Request the software be installed on your own PC, or the PC in your classroom. (You can use the Classroom Inspector from CSITS to see if it is already installed). Options for installation include the software, a wireless microphone and a camera if installed in a classroom. If you are using your own laptop, it may already have a camera and microphone.
   a. Visit the OU Classroom support page to:
      i. Determine if it is already installed in your classroom using the Classroom Inspector available on this website.
ii. Request it be installed
iii. Website: www.oakland.edu/csits

2. Learn how to use Panopto through the e-Learning Department
   a. Read the online documentation on Panopto.
   b. Attend a free workshop on February 5, 2015, or April 8, 2015. To register or learn about other dates visit: http://www2.oakland.edu/elis/facwork_cal.cfm.
   c. Website: http://www2.oakland.edu/elis/

3. Add a Panopto block to your Moodle course.

4. At the beginning of class start Panopto on your PC
   a. You can choose what you would like to record and these option will be set for future recordings.
   b. If you have multiple sections or classes, choose which Moodle course you want to save it under.
   c. Start the recorder.
   d. At the end of class, stop the recorder.
   e. The video will automatically upload to your PC.

Additional Comments: Do not be hesitant to try this! It takes very little effort but the rewards are plenty. The students thank me in person, leave positive comments on my end-of-semester review, and applaud my use of it in “Rate My Professor.”
The Wiki Way: Fostering Online Reflection and Collaboration

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Type of Strategy: Online learning where participants must collaborate in order to complete learning activities and assignments

Goal: The goal is to encourage people to use the strengths of the online environment in order to learn together in a collaborative manner in a way that also requires collaboration to complete assignments.

Type of Course: a graduate course exclusively online (participants were new faculty)
Course: Graduate Certificate in Higher Education
Typical Number of Students in Course: 30+
Application to Course: Easy

Brief Overview of Strategy: Students are required to submit a wiki page summarizing and critiquing some of their own experience of professional education. This experience can be either their experience of teaching or being a student. Students are then required to comment on the pages submitted by other students, referring to the literature where possible. They are then required to respond to comments posted on their pages.

Step-by-Step Instructions of Strategy
1. Students each submit a wiki page summarizing and critiquing some of their own experience of professional education whether as student or teacher.
2. Students comment on at least two pages of other students, relating to their own experience and the literature where appropriate.
3. Students respond to comments posted about their own pages.
4. Excerpts from the online dialog are used in the final assignment which requires participants to show how they have supported and contributed to the learning of other students in the course.

Additional Comments: It is important to provide, and actively support, a collaborative and informal environment in which people can feel safe to open up and reveal something of themselves and where comments can be offered and accepted in a constructive manner.

Reference
An Outcome-Driven Online Graduate Course: Real Time Systems Course

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Type of Strategy: Teaching strategies for online courses are naturally different from traditional teaching in a regular classroom. In this paper we explain the techniques used to increase students interactions in an online course. Normally a course has five or six outcomes or objectives. We expand it to fourteen outcomes and re-arrange the course material so that each week the course material for one of the outcome can be taught. Students do assignments related to the weekly outcome so that we can assess whether the students met the outcome. If necessary more feedback is given so that the students can meet the outcome expected. This paper presents the outcome for a graduate online course on “real time systems.” The course coverage is re-organized to meet the weekly outcome.

Purpose, Goal(s) or Learning Outcome(s) for Strategy

Measurement of the weekly outcome
The weekly homework assignments, monthly tests, group discussions on the forum, mid-term paper presentation on the Moodle, and final project and presentation, are used to measure the weekly outcomes. The grading and tests are similar to a regular graduate course. The quality and quantity of the material taught in the online course is identical to that taught in a class room based course. Since we monitor and assess the course outcome every week the outcome based online course meets the course objectives much better than the traditional course. In an online course, some students put in less effort some weeks, and barely meet the overall course objectives. In our method of weekly outcome based online course, the students are monitored for the outcome every week and they tend to meet all the weekly outcomes.

Assessment of outcomes
A simple survey questionnaire listing the weekly outcomes were given to the students and the feedback is collected. At the end of the course the survey for course objectives were given. The students taking the outcome based course met the course objectives much more than that of the traditional course. The problem solving skills and critical thinking skills for the students are especially developed well since they are emphasized every week indirectly when we design the course for weekly outcome.

Type of Course: Graduate online course.
Ease in which strategy could be modified and/or applied to other courses: Easy
Name of Course: ECE 666 Real Time Systems
Typical Number of Students in Course: 20
**Brief Overview of Strategy**

The weekly assignments develop skills like, Creativity, What-if analysis, Problem-solving and Critical thinking. Critical thinking involves questioning the assumptions and normal solutions and encourages finding alternative/ better solutions. Students communicate with the teacher or communicate with other students during the week to clarify and understand the material.

Student Forum in the Moodle provides a method for students to communicate. The instructor monitors the discussion in the “Forum” to give his/her input and provide leading questions to direct the students towards the right answer.

**To meet the weekly outcome**

Create a weekly course work and assignments that outlines specific and measurable outcomes for every week. Consider individual needs of students and make sure that the outcomes are met by all. Provide challenging questions to high performing students and give them higher points.

Student’s abilities and skills differ. Their pre-requisite course knowledge affects their performance in the current course. We test the basic pre-requisite knowledge expected from the registered students during the first week of the course and provide necessary feedback to the students.

**Step-by-Step Instructions of Strategy**

**Real Time System Course Outcome**
- Know the definition and characteristics of Real Time systems
- Know the various task assignment and scheduling methods. For example RM and EDF scheduling.
- Become familiar with Real Time system development tools like Matlab RT tool box, ETAS tools
- Know the important characteristics of Real Time Operating System,
- Know about the RT System requirement, design, and performance analysis.

**Weekly Outcomes**

**Week 1:** Know the characteristics of Real Time systems- Soft, Hard, Hybrid systems. Recollect the pre-requisite material- Embedded systems characteristics and basic design.

**Week 2:** Know the definitions of various terms in Real Time systems and discussions on real time system design issues. Hardware design issues for RTS.

**Week 3:** Know the Characteristics of Real-Time-Operating –System (RTOS), various RTOS available in the market. Basic concepts of task scheduling: Clock driven, Priority driven, RM scheduling, EDF scheduling and others.

**Week 4:** Know the various real time software tools and their applications. Matlab Real time tool box (Simulink coder), ETAS tools like Intecrio and ASCET for simulating real time scheduling. Free tools as add on to Matlab for testing Schedulability and graphing the time line.
**Week 5:** Know the challenges and solutions for “Dead lock and Live lock”. Use of UML to support Real time system design stages.

**Week 6:** Know the use of UC/Cos real time operating system details and use for a simple application.

**Week 7:** Know the details of the following: Slack stealing, fast slack stealing, priority inversion blocking, how to use priority inheritance, priority ceiling protocol, resource sharing, direct blocking, push through blocking, resource management.

**Week 8:** Make a presentation using power point on one of the advanced issues or topics in real time systems. Submit on the Moodle audio embedded on power point. These slides will be viewed by other students and questions are asked using Moodle “Forum”. The questions and answers are viewed by all the students. This activity increases more interaction between students.

**Week 9:** Know the challenges and details of real time communication: CAN protocol, Ethernet protocol.

**Week 10:** Know the details of Real time data bases and applications.

**Week 11:** Know how to use Cheddar software tools to perform timing simulation and analysis of RTS.

**Week 12:** Know how to do performance estimation, performance analysis and engineering considerations.

**Week 13:** Know how to apply Divisible Load Theory and Fault Tolerance in RTS.

**Week 14:** Know to demonstrate the knowledge gained in this course as a term project with a report and also as a power point with audio and share it on the Moodle with all the students and answer the questions and doubts on the “Moodle Forum”.

**Additional Comments**
Since the instructor is now more focused on weekly outcome, the course is taught more creatively with effective guidance. The students interact with the instructor more and meet the outcome expectations. Delivering an online course is more challenging and combined with outcome driven concepts, the effort for teaching is much more, but greatly rewarding and effective.

**References**
http://www.bestoutcome.com/assets/files/PDFs/Outcome-driven%20planning%20course%20profile.pdf
http://www.ncrel.org/sdrs/areas/issues/envrmnt/go/go4outcm.htm
www.naspaa.org/jpaemessenger/article/VOL18-2/05_Kimoto.pdf
CyberCourse: Improving Skills Courses

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Type of Strategy: Building effective skills courses from the ground up

Outcomes for Strategy: By the end of a skills course (programming, statistics, writing, etc.), students:

- Are able to complete tasks by themselves.
- Use some of the problem solving techniques of experts, like patterns and big ideas.

Type of Course: Skills course, like programming, statistics, and writing. Works best for intro courses

Name of Course: management information system, introduction to programming, Web programming, and introduction to Web technology

Typical Number of Students in Course: 20-50

Ease in which strategy could be modified and/or applied to other courses: Difficult (build a textbook replacement for each course)

Brief Overview of Strategy

Research tells us how to help students learn skills. Here’s what a good skills course looks like:

- Replace textbooks with higher quality online content. Content that’s about doing tasks, not memorizing. Students learn problem solving skills through explicit work patterns, at various levels of abstraction.
- Embed exercises in the content. Writing, debugging, analyzing... no multiple choice. Every exercise is graded by a person. Students get feedback on what they did right and wrong.
- No lectures. Class time is for problem solving. Professors help students one-on-one.
- Fewer topics, in more depth. Spend time learning how to think, not memorizing more formulas.

CyberCourse (https://cybercour.se) is a philosophy, set of practices, and open source software to help create and run effective skills courses.

**Step-by-Step Instructions of Strategy**

- Authors write high quality course content that implements research findings. Authors include exercises with grading rubrics.
- Authors give away or sell access to courses. Courses are used at universities across the country. Authors control 100% of the revenue, so they can afford to set low prices. Courses are economically self-sustaining.
- Students work through courses, doing exercises, getting feedback, and going to class.
- Graders give feedback quickly and accurately, using “clickable rubrics” created by authors.
- Faculty help students when they’re stuck. They track student progress. They give exams.
- Students learn more skills.

The bottom line: students get more value for the money and time they invest in education.

**Resources, Citations, References for Strategy**

CyberCourse (Cyco for short) is based on the work of many researchers over the last few decades. None of the concepts are entirely new, although ideas like pseudents (pseudo students), problem solving patterns, and big ideas have been adapted for Cyco. What is new is the creation of open source software that helps authors create effective skills courses.

See the Cyco wiki at https://wiki.cybercour.se for details on the research underlying the project.
Extra Credit That Can Save Your Life: Creating an Emergency Preparedness Kit

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**Type of Strategy:** (i.e. in-class active learning, on-line active learning, assignment, assessment, ice-breaker, online tools, simulation, case-study, etc.) This is an extra-credit activity that students are encouraged to complete with their families (however they would like to define “family”). This activity has been offered to students in NRS 221 Informatics in Nursing, and NRS 452 Research Basis of Nursing Practice.

**Purpose of Strategy**

1. To provide students who are passing the course with an opportunity to enhance their grades.
2. To apply knowledge from informatics and research classes to the development of a disaster communication plan
3. To personalize student learning in development of a project unique to their own family.
4. To promote safety for students and their families in event of a disaster.

**Type of Course:** Undergraduate courses
- NRS 221 Informatics in Nursing (35-50 students)
- NRS 452 Research Basis of Nursing Practice (90 students)

This strategy is very easy to modify and apply to other courses. This activity can dovetail with learning objectives in many courses and several majors.

**Brief Overview of Strategy**

Students who are performing at 75% or above in the course may participate in the optional assignment of researching how to devise a communication plan for their family and to create a family emergency kit. It is recommended that students visit the ready.gov or Red Cross websites, and create their communication plans and kit according to the recommendations of these agencies. It is essential that families have input into the communication plan and are encouraged to participate in preparing the kit. Students upload their communication plan and photos of the disaster kit to faculty. It is not expected that the kits be complete since the cost involved with the project is a concern to students. The goal is to collect as many items as possible, and add to the kit over time. The family discussions about the plan and the kit offer
an opportunity for the student to teach family about basic disaster management concepts such as communication, evacuation, sheltering in place, etc.

**Step-by-Step Instructions of Strategy:** These are the instructions posted on Moodle for students:

Hello Scholars,

The *optional* extra credit assignment can earn you up to 3 points added to your final grade: 1.5 points for the communication plan, and 1.5 for the disaster kit. You are eligible to participate if your grade is above 75%. You can choose to participate in one part or both parts of this assignment, depending on how many points you would like to attempt.

**Purpose:** To complete a practical project that will benefit you and your family. ("Family" can include your apartment-mates, the people you live with, family of origin, or however you would like to define it). If you live alone, make the kit for yourself. Faculty will assign points based on how thorough the product is. Only *you* know if the content in the communication plan is accurate. I encourage you to include your family in creation of the plan and kit since they need to "buy in" to the plan and contribute personal items to the kit.

**Background:** We all know that there have been several government warnings lately. There have been natural disasters that are fresh in our memories. In times of emergency and crisis, it is important for you and your family to have an emergency communication plan. It is also important that you have an emergency preparedness kit. I did not want extra credit to be "busy work" for you or for me, but something that is valuable.

**Instructions:**

**Part A: Create a Communication Plan for Your Family**

Go on the link [www.ready.gov](http://www.ready.gov). You will see links for the communication plan, and actually some templates. Determine how you will contact each other in an emergency. You will need to get your family or roommates involved to make these decisions.

You can earn anywhere from 0 to 1.5 points for this section of the assignment. I am looking for a thorough and complete plan that aligns with the recommendations of governmental agencies. I don't need to see anything that is private, but I do need to see proof that you completed this assignment (scanned documents or photos). The information you provide will be totally confidential and I will delete your work after I have reviewed it. Keep copies of your plan in numerous places and distribute copies to your family members!

**Part B: Emergency Kit**

Again, go to Ready.gov or the Red Cross website and review how to build an emergency kit. Get a plastic bin, box, duffle bag, or whatever works for your family, and fill it with the required items. It
is great to get the family involved, and they will need to include some of their personal items in the kit. I do NOT expect you to spend money on this. Gather what you have now, and add items to your kit as you can.

Grading will be essentially the same as part A. You will need to take a photograph of your kit and upload it. If you can’t get the entire kit together, take a picture of what you have. There is value in getting this started for you and your family.

Additional Comments

About 10% of the students participated in the assignment, which is better than the typical 3% participation rate cited in the literature (Harrison, Meister, & LeFevre, 2011). The feedback from students was very positive. One student actually had his family practice and time the evacuation from their home to their meeting place. This particular student had immigrated to the U.S. to flee a war, and said that this assignment should have been required. Many students said they enjoy working with their families on this project because of the “bonding” and “beginning to feel like the nurse in family.” As a nurse, it is personally satisfying to know that these students and families are prepared for a disaster.

It is a goal of the School of Nursing (SON) to incorporate more content on Disaster Management in the curriculum, so this strategy meets that goal. It is my personal goal to encourage others to be “ready.” Students in NRS 221 are either new sophomores or new to the RN-BSN program or the Accelerated Second Degree programs. Many of them have been out of school for a long time, do not score as high on classwork as they would like, and would benefit from an extra-credit opportunity. I wanted an activity that would not be “busy work”, that had practical benefits, and that would not be an extra burden to my work load. This assignment is a win-win for everyone.

Resources
www.ready.gov/
www.redcross.org/prepare
“ShowMe” Tutorials

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Type of Strategy: Online tool to create and share content on an iPad

Purpose of Strategy

- Narrate content for an instructional video of pre or post reading materials for your course
- Create and narrate specific content about training skills needed to operate specific equipment.
- Review materials for quizzes/tests
- Model Math and Statistical problems online for class and later review
- Post a link to a narrated video update of an announcement, introduction or continuation of information about your course.
- Utilize as a tutoring tool to enhance lecturing notes.

Type of Course: Can be incorporated into any type of course in a wide variety of teaching formats.

Name of Course: Currently, Clinical Teaching for Residents and Technicians at William Beaumont Hospital in Royal Oak, MI

Typical Number of Students in Course: 4-100

Ease in which strategy could be modified and/or applied to other courses: Easy

Brief Overview of Strategy

The “Show Me” App can be downloaded to your iPad or iPhone from iTunes. The App is a free download. This App can be used along with images from Power Point to create narrated videos of explanations and content for courses. Videos can also be created “just in time” on the spot - of demonstrations for training purposes on how to operate a piece of equipment or how to follow a procedure. Accuracy of information is provided because images can be taken using the iPad and/or iPhone camera. Annotation options are available within the App. Narration can take place in real time and sharing the “Show Me” presentation is a quick process – a link to the recording is forwarded to the registered users e-mail address. Online modeling of Math and Statistic problems can also be created using this App. Learners can then re-visit the link to the
“Show Me” video to review information for quizzes, tests, or to prepare for class. In addition, a Subject Matter Expert (SME) can provide learners with detailed information about course concept and/or prepare learners by providing important documentation about skills needed to perform a certain task.

**Step-by-Step Instructions of Strategy**

1. Decide on the topic you want to cover in the video.
2. Create images, screen captures, use photos or type and save the information in a PowerPoint presentation. Save the power point presentation as a regular presentation.
3. Save and rename the power point presentation to your desktop as “images” (jpeg images) within the Power Point program. Power Point places the images (slides) into a new directory folder saved as individual pictures.
4. Email the images/folder to yourself as an attachment.
5. Open your iPad and open your Gmail box (or whatever email client you used to send yourself the email message).
6. Hold down your finger on one of the images and one of the choices that appears will be “save all images” – click on that option and all the image slides will be within your “picture” folder on your iPad.
7. You will be importing them one by one into a ShowMe presentation.
8. Upload the ShowMe App for free on your iPad. Register a username and password to get an account.
9. In the ShowMe App, touch on “create.”
10. Touch the “Picture icon w/plus sign” to add an image, touch on “choose photo”, touch on the location where your images are to choose one.
11. Touch on the image, then, touch “done.”
12. When ready, touch on the red record button and begin narration by reading your prepared rehearsed script, or deliver an impromptu narration from your script.
13. Touch the “pause” button to stop the recording.
14. Touch the “forward arrow” in the upper right hand corner to proceed to the next ShowMe board.
15. Follow steps 10 through 13 to create the next narration.
16. Be sure to experiment with the tools within the App. For example, there is an eraser, a “clear all” icon, a “back” arrow, and many colors to choose from to annotate on the image or just on the ShowMe board.
17. When finished with the narration, touch the “Save ShowMe button.
18. Review your ShowMe and touch “Save” if you would like to save and share it.
19. Name your ShowMe then touch “next.”
20. Choose applicable topics, then touch “Done adding topics.”
21. Touch on your ShowMe in the display section. Then, touch on the “share” arrow.
22. Choose the application as to how you would like to share the narration: Facebook, Twitter, Email it or open it in Safari. If you choose to email it, you will receive a window where you can type in email addresses to share immediately. Type in your own email address to receive the link to the ShowMe that you can send out via email later.

Additional Comments

This app is user-friendly and works well when using the familiar Power Point program to create images of Power Point slides. The instructor can decide on content that would be most helpful for the video. This App is best used for content to present that is most frequently forgotten and/or for test review, pre-reading materials, training about skills and how to operate equipment prior to entering an area or situation. Scripting is necessary as is preparation of images of art work, photos and citing of references if necessary. Videos are best if they last 15-17 minutes or less. The link of the ShowMe video can be inserted into Moodle or sent to the students in an email message with an explanation or instructions.

References

Helpful Websites
The “ShowMe” App website in iTunes:
Show Me – The Online Learning community:
http://www.showme.com
ShowMe App You Tube:
http://www.youtube.com/user/ShowMeapp
iPadagogy App Review ShowMe interactive whiteboard tutorial:
http://youtu.be/Lj7IqQzkHpA
Library Course Pages

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Type of Strategy: Online Tool

Purpose of Strategy: Library Tutorials provide self-paced assistance with all manner of library-related topics.

Type of Course: Any

Name of Course: Any

Typical Number of Students in Course: Any

Ease with which strategy could be modified and/or applied to other courses: Library Course Pages are always customized to meet the needs of specific courses and/or class sections.

Brief Overview of Strategy

Library Course Pages can include almost anything, such as links to relevant research databases or online reference material. Some course pages also provide links to key websites, ebooks, and PDF documents containing tips and instructions for library research. A library course page is usually developed in conjunction with a library session, and can be designed in partnership with the classroom faculty member or the library faculty member alone can develop the content.

Step-by-Step Instructions of Strategy

Simply contact your Liaison Librarian to get your course page started!

Resources: If you have any questions or comments about Library Course Pages, please contact Beth Kraemer, Library Instruction Coordinator, at kraemer@oakland.edu.
Library Tutorials

Beth Kraemer
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Type of Strategy: Online Tool

Purpose of Strategy: Library Tutorials provide self-paced assistance with all manner of library-related topics, including using databases, applying research concepts, and accessing library resources.

Type of Course: Any

Name of Course: Any

Typical Number of Students in Course: Any

Ease with which strategy could be modified and/or applied to other courses: Appropriate without modification, where applicable.

Brief Overview of Strategy

Library Tutorials are stand-alone tools that can be referred to on an as-needed basis.

Step-by-Step Instructions of Strategy

Contact your Liaison Librarian if you are interested in integrating any of the Library’s tutorials into your courses!

Additional Comments

The tutorials include the Library’s widely used anti-plagiarism course and a copyright basics course, both of which are often assigned by classroom faculty to supplement their students’ understanding of these important concepts.

Resources: If you have any questions or comments about Library Tutorials, please contact Beth Kraemer, Library Instruction Coordinator, at kraemer@oakland.edu.
Library Widget for Moodle

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Type of Strategy: Online Tool

Purpose of Strategy: The widget gives you a snippet of customized links to library resources to include in your Moodle class.

Type of Course: Any

Name of Course: Any

Typical Number of Students in Course: N/A

Ease with which strategy could be modified and/or applied to other courses: The tool has customization options built into it.

Brief Overview of Strategy

The library widget for Moodle allows you to select any combination of the following for your class:

- A link or search box for Library OneSearch, a Google-like search for articles, books, and other materials in our library and beyond.
- A link to a course or subject guide with library materials recommended for you specific class.
- A direct link to course reserves that makes your students’ access to your reserved materials much more immediate than having to go to the library website.

Step-by-Step Instructions of Strategy

The library widget for Moodle can be found at http://library.oakland.edu/services/instruction/widget/

Please follow the on-screen prompts to go through the 3 steps of making custom choices and getting the resulting snippet to paste into your Moodle course. Pasting instructions are included on the last screen of the widget.

Resources: If you have any questions or comments about the widget, please contact Mariela Hristova at hristova@oakland.edu.
Libraries Copyright Course – Copyright and You

Julia Rodriguez
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Type of Strategy: Self-paced online learning course with embedded assessment and badge of completion.

Purpose of Strategy: Give students a greater understanding of the basics of copyright law, rights as a creator of content, and how to responsibly use content created by others. The course is divided into categories, as detailed below:

What is copyright?
- Basics of copyright law and its rights and limitations
- What is copyrightable and what isn’t
- Difference between copyright infringement and plagiarism

Learn how to responsibly use copyrighted materials
- Understanding the principles of Fair Use
- How to obtain copyright permission from the copyright owner
- How to locate copyright free content

Learn how to protect intellectual property
- Choosing from the various licenses available.
- Applying a license to original content.
- What to do if someone has violated your copyright

Type of Course: All-online, appropriate for all levels

Name of Course: Any

Typical Number of Students in Course: Any

Ease with which strategy could be modified and/or applied to other courses: Appropriate without modification.

Brief Overview of Strategy

The tutorial takes about 40 minutes to complete. At the end, students are directed to a quiz and need to answer 8 out of 10 quiz questions correctly to receive a badge of completion.
Step-by-Step Instructions of Strategy

Go to library homepage > library.oakland.edu > under FIND click tutorials > see featured tutorials on right. Right click link to embed in Moodle course or direct student to webpage.

http://research.library.oakland.edu/sp/subjects/tutorials.php

Additional Comments

This tutorial can easily be assigned as a requirement for a course. If students have already completed the course they can simply share their completion badge information with a professor.

Resources: For more information on the Library’s copyright course, contact Katie Greer at greer@oakland.edu.
Libraries Plagiarism Course – *Using and Citing Sources*

Julia Rodriguez
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Type of Strategy: Self-paced online learning course with embedded assessment and badge of completion.

Purpose of Strategy: Give students a greater understanding of academic integrity and plagiarism; how and when to use sources; and how to quote, paraphrase, and cite. The course is divided into six sections, detailed below:

Part 1: Academic Integrity and Plagiarism Lesson
- become familiar with the definition of academic integrity and plagiarism
- understand the consequences of misconduct at OU
- learn how to recognize plagiarism and avoid it

Part 2: How and when to use sources? Lesson
- understand why outside sources are used in academic prose
- become familiar with common situations when outside sources are needed

Part 3: Paraphrasing Lesson
- learn best practices in choosing when to paraphrase and summarize
- understand how to paraphrase properly

Part 4: Direct Quotes Lesson
- learn best practices in choosing what to quote directly and when
- become familiar with strategies for integrating direct quotes into one's own prose

Part 5: Citation Styles Lesson
- understand the role of citation style and their common principles
- get exposure to commonly-used citation styles

Part 6: Putting It All Together Lesson
- get practice in using sources and citing them correctly

Type of Course: All-online, appropriate for all levels

Name of Course: Any
Typical Number of Students in Course: Any

Ease with which strategy could be modified and/or applied to other courses: Appropriate without modification. Course includes discipline-specific branches within the module on citing sources.

Brief Overview of Strategy

The tutorial takes about 40 minutes to complete. At the end, students are directed to a quiz and need to answer 8 out of 10 quiz questions correctly to receive a badge of completion.

Step-by-Step Instructions of Strategy

Go to library homepage > library.oakland.edu > under FIND click tutorials > see featured tutorials on right. Right click link to embed in Moodle course or direct student to webpage.

http://research.library.oakland.edu/sp/subjects/tutorial.php?faq_id=35

Additional Comments

This tutorial has been widely adopted as a requirement for many courses. If students have already completed the course they can simply share their completion badge information with a professor.

Resources: For more information on the Library’s copyright course, contact Katie Greer at greer@oakland.edu.