



## Iron Chef Contest Instructions – Fall 2017

The Iron Chef Contest challenges you and your team to develop a teaching and learning solution that responds to a scenario complicated by secret ingredients.

1. We present you with a theme—a teaching and learning topic that you may be exploring in the classroom.
2. Next we complicate the theme with “secret ingredients.”
3. Your team will have 20 minutes to collaborate on a solution that includes the theme and the secret ingredients. Chromebooks (connected to AV) and other “cooking” tools will be provided, including blank slides where you can capture your key points and cite the research.
4. When the buzzer sounds, each team will have 3 minutes to present their solutions.
5. As you listen to other groups’ ideas, please assess their work using the Iron Chef Contest Individual Rubric. Carefully consider how each group applied research-based concepts. Link to the Iron Chef Contest Google Form to submit your team score for each group.
6. Winners receive a Bloom’s Taxonomy Tool.

### The Scenario

#### Focus on Student Responsibility

- How do you promote students’ responsibility for their learning? Your dean attended Dr. Sandra Y. McGuire’s lecture at the Provost’s Teaching & Learning Symposium, and asks you to form a team to identify how to promote students’ responsibility for their learning. Devise an activity/assignment that helps students develop responsibility for their own learning and create a set of assessment criteria that measures what they learned. Present your plan to colleagues: emphasize the research-based elements of your assignment design.

#### Add the Secret Ingredients

- Apply Bloom’s Taxonomy (see handout)
- Spin for an Instructional Technology

#### Create Your Team’s Recipe

- Work with your team to create an activity or assignment and a formative assessment. Your recipe should combine the standard ingredient with two secret ingredients. Test your recipe with the Iron Chef Contest Individual Rubric, then present it to your colleagues.

#### Secret Ingredients

- Bloom’s Taxonomy - Refer to the handout/slides for key ideas.
- Instructional Technology tool – Spin for a technology. Possibilities include:
  - [Active Learning Classrooms](#) -> Team Green
  - [Adaptive Release](#)
  - [Blackboard Collaborate](#) -> Team Blue & Team Red
  - [Clickers](#)

- [Google Apps](#)
- [VoiceThread](#) -> Team Yellow

#### Standard Ingredients

- Promoting students' responsibility for their own learning

### Resources

#### Utensils & related ingredients for your recipes

- Wi-fi enabled Chromebook for research, rubric, recipe presentation, notebooks & pens
- Pedagogical Sous Chefs Jennifer, Kerrie, and Linda will circulate the room & may provide *limited feedback*
- Technical Sous Chefs Mariann and Jalisa will be available for technical support

#### Chromebooks

- Connected to wi-fi
- 3 tabs open:
- FDC resources
- Interactive rubric
- Google Slides presentation
- Feel free to open additional tabs for further research

#### Interactive rubric

- Use the rubric as a guide to evaluate your own recipe during your working time
- During presentations, **stay on your tab** and fill in the column for the team who is presenting

#### Google Slides presentation

- Please use the Google Slides to describe and present your recipe

### Research-Based Links from the FDC

#### Visit the FDC Website for These Links and More:

- Active Learning: <http://fdc.umbc.edu/resources/pedagogy/engaging-students-with-active-learning/>
- Assignment Design: <http://fdc.umbc.edu/resources/pedagogy/designing-appropriate-assignments/>
- Backward Course Design: <http://fdc.umbc.edu/resources/pedagogy/course-design/>
- Collaborative Learning: [http://www.ideaedu.org/Portals/0/Uploads/Documents/IDEA%20Papers/IDEA%20Papers/Paper\\_IDEA\\_65.pdf](http://www.ideaedu.org/Portals/0/Uploads/Documents/IDEA%20Papers/IDEA%20Papers/Paper_IDEA_65.pdf)
- Motivating Students: <http://fdc.umbc.edu/resources/pedagogy/motivating-students/>

### The Resulting Assignments

#### Team Green - Stephen Bradley, Kathy Glyshaw, Vickie Williams

#### Our Recipe

- Promoting students' responsibility for their own learning by adopting
- Bloom's Taxonomy
- Instructional technology: Active Learning Classroom

#### Our Evidence-Based Approach

- We plan to develop student responsibility through a collaborative learning approach: Students will learn about the different levels of Bloom's Taxonomy, interconnections between the levels and will demonstrate understanding through reflection on what learning means.

#### Our Activity or Assignment

- The active learning classroom will be set up such that each table is color coded to correspond with levels of Bloom's Taxonomy as represented on the inverted pyramid graphic. In small groups, the students will discuss each level based on the colors, mind-map and notate their learning styles, then, students will move to the next table and repeat until they have completed a series of activities until every group has visited every table/level of the Taxonomy.
- At each table, students will reflect on, and share with each other, times when they have learned well or have struggled with learning at that level of Bloom's Taxonomy. Seed questions will be present at each table to guide the students process.

#### Our Formative Assessment

1. Activity: 3. Small groups, set within the context of an Active Learning Classroom.
2. Use of Bloom's Taxonomy - 4. Effective use of the system for driving student based learning experiences.
3. Use of Technology: -1 1. We modeled the Active Learning Classroom that has technology present, however, we did not address this directly in our discussions.
4. Student Responsibility Effect: - 3. We might have explored more ways to guide the groups through this process as Bloom's Taxonomy has a number of parts that might need more time to discuss than is available in the class period.
5. Use of Evidence: - 2. We could have discussed this in more depth to identify other approaches and techniques.

#### Our Final Thoughts

- Introduce to the students how Bloom's Taxonomy is an effective way to understand how learning occurs.
- Offer readings on learning that demonstrate positive outcomes in terms of not only higher grades but how this will impact student's work life in positive ways, post university.

### **Team Blue - Kate Drabinski, John Schumacher, Nianshen Song**

#### Our Recipe

- Promoting students' responsibility for their own learning
- Bloom's Taxonomy
- Instructional technology: Blackboard Collaborate

#### Our Activity or Assignment

- On blackboard:
- Students will be assigned groups to work together to understand and explain the connection between two different concepts in the reading. Using Blackboard Collaborate each group will develop a lesson plan to teach the rest of the class about the connection between the two concepts. They will also use their work to create an exam question.
- We ask students to review the boom's taxonomy and to justify why the connection is on the analyzing (or other) level of the taxonomy.

#### Our Formative Assessment

- Apply a rubric: student will present their works to the class.
- Provide a rubric to self-assessment first

- As a class, we write the exam questions

#### Our Final Thoughts

- We will explain the reasons for group work to students, and explain how Blackboard Collaborate aids that group work, even though they can't necessarily find a time and place to meet. The goal is to help students take responsibility for their own learning, partly by putting them in charge of the test itself.

### **Team Red - Jianwu Wang, Karuna Joshi, Katie Gibson, Neha Raikar**

#### Our Recipe

- Promoting students' responsibility for their own learning
- Bloom's Taxonomy
- Instructional Technology - Blackboard Collaborate

#### Our Activity or Assignment

- Students are given the "first half" of a programming problem as a take-home assignment
  - Prior to writing the program, they must read selections from the book/watch videos to learn the basic concepts they will need
- Once in class, in the Collaborate environment, the concepts learned at home are briefly reviewed, and students can use Collab to ask questions (or to answer other students' questions)
- Students are put into small groups (4-5) and are given a random "first half" (from another student) and must complete the rest of the program in class
  - Students can use Collaborate to ask
  - They're not told what the second half is before class

#### Utilizing Bloom's Taxonomy

- Remembering, Understanding
  - Watching videos/reading textbook on concepts
- Applying
  - Writing the "first half" of the program
  - Completing the "second half"
- Analyzing, Evaluating
  - Working with previous student's code to complete the program
  - Peer evaluation -- quantitatively examining other student's work
- Creating
  - Throughout the entire programming cycle
    - Creating the first half, understanding another's first half, creating the second half

#### Our Evidence-Based Approach

- Collaborative creation of program will encourage students to teach others, and to explain concepts they've only previously "intrinsically" understood.
- Direct and immediate application of learned concepts will enforce deeper understanding of concepts.
- Students will be motivated due to "peer pressure," where failing to complete your half of the assignment will negatively impact other students.

#### Our Formative Assessment

- Program for the "first half"
- Completed program ("second half")

- Record of the discussion
  - Blackboard Collaborate
  - How helpful and/or knowledgeable the students were
- Peer evaluation
  - Quality of code and comments
  - Quality of the collaboration

#### Our Final Thoughts

- This assignment can easily be applied to many different course topics, and is possible to use across different disciplines.
- It's not language or environment dependent, and can be adjusted to focus on different disciplines.

### **Team Yellow – Sarah Leupen, Mariajose Castellanos, Jennifer Hughes, Kal Nanes**

#### Our Recipe

- Promoting students' responsibility for their own learning
- Bloom's Taxonomy
- Instructional technology - Voice thread

#### Our Evidence-Based Approach

- Teaching others has been demonstrated to help students achieve higher tiers of Bloom's Taxonomy.
- Teaching students Bloom's Taxonomy has been demonstrated to increase their performance.
- Giving students choices in an assignment has been demonstrated to increase intrinsic motivation.
- Students will work harder for peers than they will for an instructor.

#### Our Activity or Assignment

- Students will choose a learning objective from the course content and will create a Voicethread problem / case study / etc as a challenge to their peers. The creator will be tasked with identifying their challenge's position on Bloom's Taxonomy and will be instructed to aim for the three highest tiers. Peers will be provide substantive audio feedback (answers or clarifications to the challenges).

#### Our Formative Assessment

- Voicethread creator will be graded on a rubric including: Question being matched to the learning objective; Taxonomy tier correctly identified; Question clear; Challenge level appropriate (not too high or too low).
- Participants will be graded on participation and on the degree to which the comment advances the conversation.

#### Our Final Thoughts

- This sounds like fun! We want to try it!

### **The Results**

The assignments that were developed were wonderful and can be incorporated into a broad range of courses! Ultimately, Team Red won the competition!

Join us in the spring 2018 semester for another fun and useful Iron Chef Event hosted by the Faculty Development Center and Instructional Technology!

## Rubric

### Iron Chef Contest Team Scoring Rubric

<b>Directions:</b>					
1. Select your team tab below.					
2. Give each team 1-4 points per criterion. Skip your own team.					
<b>This form will tally the points for the entire program.</b>					
		<b>Give each team 1-4 points per criterion (1= criterion not met, 4= exceeds expectations)</b>			
Criteria		Red	Blue	Green	Yellow
Activity/ Assignment & Assessment Criteria-- Definition and Description	Vividly and succinctly describes the activity/assignment designed to promote students' responsibility for learning. Clarifies how it will promote student responsibility and previews how it will be assessed. <i>I have a clear vision for how this activity/assignment will work.</i>				
Use of Bloom's Taxonomy	Creatively synthesizes the challenge of promoting student responsibility with Bloom's Taxonomy. Demonstrates understanding of how Bloom's Taxonomy applies to the given scenario by describing student learning outcomes in terms of specific levels of the taxonomy.				
Use of Technology	Integrates technology seamlessly into the activity/assignment; technology greatly contributes to the student learning experience.				
Student Responsibility Effect	Exemplifies a brilliant and original approach to promoting student responsibility for learning. <i>I predict students' responsibility for their own learning will be significantly enhanced through this approach.</i>				
Use of Evidence	Applies multiple evidence-based approaches or techniques to the development of the activity/ assignment and the assessment criteria, referring to sources as appropriate.				
<b>Team Totals</b>					