

PANDEMIC SURVIVAL BY DESIGN

Jigsaw Group Activity

TEAM SELECTION

Participants will form groups by lining up according to birthday month and diving up to create four teams as follows:

Team	Design Focus
1	Situational Factors
2	Learning Goals
3	Feedback & Assessment
4	Teaching/Learning Activities

INSTRUCTIONS

PART 1 – SEPARATE TEAMS

1. Read the **Sweating Sickness Information Sheet** on the following page.
2. Study your **Team # Tip Sheet** for information on your design focus.
3. Complete the **Team # Worksheet** for your team's focus topic in **Google Drive**. (The link appears under Module 5 in Moodle). Answer as much as you can with the information you have for now. Highlight questions you were unable to answer and consider returning to them after at the end.
4. Using the information gathered from the Worksheet in step 3, collaborate with your team mates to complete the **Team # Focus Planning Table**, also in **Google Drive**.
5. Print four (4) copies of the **Focus Planning Table**, one for each team.

PART 2 – ALL TEAMS TOGETHER

1. Review the design specifications completed by all the teams in their individual **Team # Focus Planning Tables** and gather together.
2. Discuss and negotiate changes that must be made to ensure course alignment. You may use the Eno board to help with your collaboration.
3. On Google Drive add your updated plan to the **Combined Workshop Design Plan Table** as agreed by the entire group.
4. Your completed plans will be reviewed and comments will be made in the All Sharing Moodle Forum for this module.

Google Drive Instructions

1. For this activity you may work concurrently at different computers on the Google Drive worksheet file for the design focus of your group.
2. Links to these files are provided in the Moodle course.

SWEATING SICKNESS INFORMATION SHEET¹

The Boston Globe
no.203.078 ALL THE BOGUS NEWS THAT'S FIT TO PRINT - Since 2013

SWEATING SICKNESS STRIKES

Thousands Turn to Roxbury Community College for Survival Skills Training

BOSTON — In an outbreak of Hyperhidrosis, commonly known as Sweating Sickness, thousands in the Boston area turn to Roxbury Community College (RCC) for help battling the epidemic.

After years protesting the safety and location of the Boston University National Emerging Infectious Diseases Laboratories (NEIDL), Roxbury residents' worst fear became a reality last week when an accident at the lab released the pandemic infecting thousands of victims within days.

"We are fortunate RCC has been preparing for such an outbreak since NEIDL opened its doors Fall 2008 in the South End," reported an anonymous RCC faculty representative. With administrative support, RCC scientists researched the preventative measures for a decade which faculty have now used to design the only survival skills training known to effectively control contamination by this mysterious disease.

Sweating Sickness, not seen since the 1578 England epidemic, has no known cause though it is believed poor sanitation, sewage, and water contamination may be to blame. The onset of symptoms is dramatic and sudden, with death often occurring within hours.

Roxbury Community College provides training on preventative measures, applying best practices in the design and delivery of its Pandemic Survival Workshops. Registration is required with a waiting list exceeding six months for this highly demanded program.

Advertisement showing RCC student wearing mask to fight epidemic as she waits for survival workshop.

RCC, Page B8

Symptoms

- Cold shivers, headache, body aches, dizziness, and severe fatigue.
- After one to three hours, violent, drenching sweat came on, accompanied by severe headache, delirium, and rapid pulse.
- Irresistible inclination to sleep and feeling of exhaustion (patient can collapse or go into semi-coma).
- Sweat glands may grow several inches in size.
- The excess sweating might have caused dehydration and subsequent complications.
- Immunity not conferred by an attack; not unusual for patients to have several attacks.

Causes

- The cause for sweating sickness is still unknown. Research indicates the cause might be unhygienic conditions (regarding improper sewage system).
- The relapsing fever may be transmitted through lice and ticks, which might explain its occurrence mostly in the summer season.
- According to a 16th century English physicians it is believed to be most dangerous for the very rich and the very poor.
- Chronic fatigue syndrome may be one of the causes as this has the same symptoms as Bornholm disease.

Treatment and Prevention

- Mixture of lime juice and extract of pine needles to shrink sweat glands to a safe size.
- Detailed procedure for good hygiene is very effective in preventing the spread of the illness.

¹ This is a fictitious modern account of an actual pandemic last seen in England in 1578. See details at:

<http://www.britannica.com/EBchecked/topic/576469/sweating-sickness>

<http://www.sweatology.net/excessive-sweating-information/what-is-the-sweating-sickness/>

TEAM 1 TIP SHEET

SITUATIONAL FACTORS FOCUS

For **Team 1** the *Sweating Sickness Information Sheet* will be particularly helpful as you undertake the task to analyze the learning environment and identify the learners' existing knowledge and skills. Anything that might in some way influence learning should be considered. Note that according to the article "thousands in the Boston area turn to Roxbury Community College (RCC) for help battling the epidemic." You may also speculate on the situational factors that might occur if such an event were to actually happen to help build your part of the design process.

INTEGRATED COURSE DESIGN MODEL

You will be completing a Worksheet in Google Drive that considers the following general categories when identifying situational factors according to L. Dee Fink:

- **Specific Context of the Teaching/Learning Situation**
- **General Context of the Learning Situation**
- **Nature of the Subject; Characteristics of the Learners**
- **Characteristics of the Teacher.**

FROM THE DICK AND CAREY MODEL²

Dick and Carey stress the following considerations during this analysis stage:

- **Entry Behaviors** - These are skills associated with learning the goal that must already be mastered. What should learners already know how to do in order to be successful with the new instruction? For example, the ability to read, or the ability to perform basic math functions.
- **Prior Knowledge of the Topic Area** - What must learners already know about the topic?
- **Attitudes toward Content and Potential Delivery System** - What are the learners' impressions and attitudes about a topic and how it might be delivered? In other words, will they have any preconceived notions about the topic or the delivery system?
- **Academic Motivation** - How motivated are learners to learn the topic, and how much is it likely to interest them?
- **Educational and Ability Levels** - What are the achievement and general ability levels of the learners? This helps determine the kinds of instructional experiences they may have had and their ability to cope with new and different approaches to instruction.
- **General Learning Preferences** - What types of learning approaches do the learners prefer? For example, lecture, seminar, case study, small-group, or web-based?
- **Attitudes Toward Educational Organization** - How do the learners feel about the organization providing the training? Do they have a positive view of management and peers, or are they cynical about leadership? With teachers, you may already know your students' attitudes about school, but keep in mind that some students actually like school, while others may hate it. It's important to know which kind of students you will be interacting with.
- **Group Characteristics** - Is there heterogeneity within the target population? If so, you want to make sure to accommodate any diversity. Also, get a general overall impression of the target population based on interactions with them.

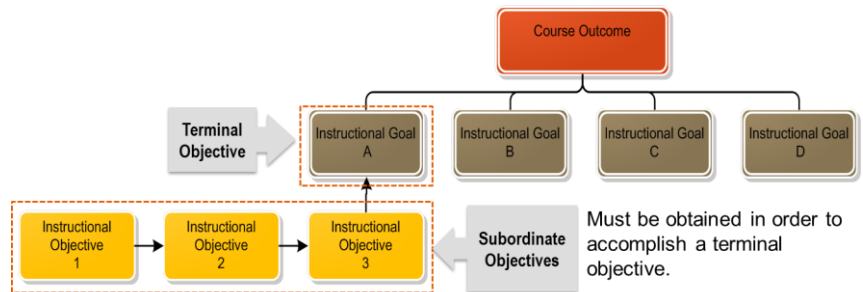
² Dick, W., Carey, L., & Carey, J. O. (2009). *The Systematic Design of Instruction*. Upper Saddle River: Pearson.

TEAM 2 TIP SHEET

LEARNING GOALS FOCUS

Team 2 can use the *Sweating Sickness Information Sheet* to consider **one or two** instructional goals that the Pandemic Survival Workshop might target to achieve the final outcome. Your goals should be from the learner's point of view ("After completing this workshop, the learner will be able to..."). The attached **Bloom's Taxonomy** handout is helpful when considering the verbs that best describe what you'd like to have learners accomplish.

A **goal analysis diagram**, such as the simple one pictured, is often used to identify all the steps required to reach a final instructional outcome.



WRITING INSTRUCTIONAL OBJECTIVES (THE BOTTOM ROW)³

Instructional objectives are generally at the lesson plan level and should answer the following:

- **Performance** – Learners will be able to do what?
- **Conditions** – With or without what? (circumstances and materials)
- **Criteria** – How well?

Example: Given an instructional goal analysis diagram, participants will be able to differentiate between a terminal and a subordinate instructional objective.

WRITING INSTRUCTIONAL GOALS (THE SECOND ROW)

Instructional goals are objectives generally at the unit level of instruction and should answer the following:

- **Learner** – Who are the learners?
- **Performance** – What will the learners be able to do?
- **Performance Context** – Where will they be doing this?
- **Tools** – With or without what?

Example: Participants will apply instructional guidelines to write effective lesson objectives.

WRITING OUTCOMES (THE TOP ROW)

"Effective learning outcomes state what students should know and be able to do as well as the depth of the learning that is expected." (Design Your Course, 2013). Outcomes should be SMART:

- **Specific (goal)** – What do I want to accomplish? Why? Who is involved? Where? For which requirements?
- **Measurable (criteria)** – How much? How many? How will I know when it is accomplished?
- **Achievable (realistic)** – How can the goal be accomplished?
- **Relevant** – Is it worthwhile? Is this the right time? The right person? Does it match our other efforts?
- **Time-bound (target date)** – When? What can I do in 6 months, six weeks, today?

Example: Increase the number of faculty participating in professional development activities 20% by September 2015. (Title III outcome statement)

³ Mager, R. F. (1997). *Preparing Instructional Objectives, 3rd Edition*. Atlanta: CEP Press.

TEAM 3 TIP SHEET

FEEDBACK & ASSESSMENTS FOCUS

Team 3's task is to formulate an assessment and feedback strategy to determine whether instruction is effective. How will you know learners are prepared to battle *Sweating Sickness* to the best of their ability? Fink differentiates between "Auditive" and "Educative" forms of assessment, more commonly known as "Summative" and "Formative" assessment. Below is a list of assessment categories identified by Angelo and Cross in "Classroom Assessment Techniques" which might be useful.

CHARACTERISTICS OF CLASSROOM ASSESSMENT⁴

- **Learner-Centered** – Its focus is on observing and improving learning, rather than on observing and improving teaching.
- **Teacher-Directed** – The individual teacher decides what to assess, how to assess, and how to respond to the information gained through the assessment.
- **Mutually Beneficial** – Students reinforce course content and strengthen their self-assessment skills; faculty sharpen their teaching focus by asking 3 questions: "What are the essential skills and knowledge I am trying to teach?", "How can I find out whether students are learning them?", and "How can I help students learn better?"
- **Formative** – Its purpose is to improve the quality of student learning, not to provide evidence for evaluating or grading students; it provides information on what, how much, and how well students are learning.
- **Context-Specific** – The assessment technique is chosen to fit the subject matter and the needs of the particular class.
- **Ongoing** – It is an ongoing process, i.e. the creation and maintenance of a classroom "feedback loop"; as this approach becomes integrated into everyday classroom activities, the communications loop between faculty (teaching) and students (learning) becomes more efficient and effective; it provides early feedback – before students are evaluated for grades – so that necessary adjustments can be made.
- **Rooted in Good Teaching Practice** – It is an attempt to build on existing good practice by making assessment more systematic, more flexible, and more effective.

SUMMATIVE VS. FORMATIVE ASSESSMENT

	Summative	Formative
Purpose	To make judgments about individual student achievement & assign grades	To inform teaching and improve learning; used as "feedback devices"
Examples	quizzes, tests, exams; term papers, lab reports, homework	Pose questions, listen to students questions and comments, monitor body language and facial expressions, Classroom Assessment Techniques

⁴ classroom_assessment_techniques - classroom_assessment_techniques angelo cross.pdf Retrieved 4/22/2013, 2013, from [http://www.harford.edu/LAC/pdf_files/classroom_assessment_techniques Angelo Cross.pdf](http://www.harford.edu/LAC/pdf_files/classroom_assessment_techniques_Angelo_Cross.pdf)

TEAM 4 TIP SHEET

TEACHING/LEARNING ACTIVITIES FOCUS

Team 4 has the task of determining what happens during the actual instruction. Below is a sampling of activities grouped per Bloom's Taxonomy⁵. You may also visit sites such as www.merlot.org among many.

KNOWLEDGE

- **Round Robin** – Small groups each generate a list as they recall important pieces of information from a lecture. Students in each group speak, moving from one to the next until all participate.
- **Note-Taking Paris** – Students pool information for their individual notes, readings, or other activities.
- **Group Grid** – Groups provide pieces of information that they place in appropriate blank cells of a grid. For example, sort list of authors, genres, quotes into appropriate rows or columns.

COMPREHENSION

- **Think-Pair-Share** – After lecture, present a prompt and ask students to think individually for a few minutes. Then, pair them up to discuss and compare their responses with a partner before sharing.
- **Team Matrix** – Pairs or small groups discriminate between similar concepts by noticing and marking on a chart the presence or absence of important, defining features.
- **Dialogue Journals or Blogs** – For a longer-term project, students record their thoughts in a journal that they exchange with peers for comments and questions. Occasionally, ask specific comprehension-based prompts.

APPLICATION

- **Buzz Groups** – Small groups discuss questions such as, *What are additional examples of...?*
- **Role Play** – Create a scenario and ask students to act out or assume identities that require they apply their knowledge, skills or understanding as they act from a different, assigned perspective.
- **Think-Aloud Pair Problem Solving (TAPPS)** – In pairs, take turns solving problems aloud to try out their reasoning as their partners listen.

ANALYSIS

- **Critical Debates** – Teams analyze an issue in preparation for a debate.
- **Learning Cell** – Provide sample analysis question stems and ask students to develop questions about readings or learning activity.
- **Word Webs** – Ask students to create a mind map identifying relationships between course-related concepts and ideas.

SYNTHESIS

- **Analytic Teams** – Team members perform component tasks of an analysis of readings, video, or presentation.
- **Group Investigation** – Teams plan, conduct, and report on an in-depth project.
- **Team Analogies** – Teams compile and annotate an anthology or course-related material.

EVALUATION

- **Three-Step Interview** – Pairs take turns interviewing each other, with questions that require student to assess the value of competing claims, and make judgment as to the best.
- **Jigsaw** – Small groups develop knowledge about a topic and plan effective way to teach others.
- **Paper Seminar** – Small groups give evaluative feedback and discuss individual student papers.

⁵ Barkley, E. F., Cross, K., & Major, C. H. (2005). *Collaborative Learning Techniques: A Handbook for College Faculty*. San Francisco: Jossey-Bass.