

NAPTA Instructor Skills Conference XII
Wed-Fri, October 12-14, 2022
Astor Crowne Plaza Hotel and Conference Center
New Orleans, LA

ISC XII Session Descriptions

Are You Ready to Troubleshoot?

Martha McKinley, NAPTA TSC Coordinator

Ready your students to be effective competitors in a competition based on simulated process upsets and incidents. Understand the competition format and what it takes to prepare your students to be ready to compete side by side with other competing teams. Hear from participating coaches what the benefits are to your students as he/she enters the work world of tomorrow.

Outcomes:

- Preparation of teams for competition
- understanding the different facets of the judging criteria
- and creating effective teams for the competition

Best Practices for Online PTEC Instruction

Jeff Laube, Kenai College

In this workshop we will discuss the best practices of online PTEC instruction. We we cover how to improve verbiage, homework, testing, and the presentation of the online course. Examples of courses will be shown.

Outcomes: Have ideas on improvements you can make on online course deliver

Developing Effective Technical Procedures

Earl Brown, Jr, Industrial Psychologists Inc

This session will cover why do we need to have procedures. Each of the following will be discussed:

- ✓ Regulatory requirements
- ✓ Good business practices
- ✓ Consistent job performance

The workshop will also explain how we identify which procedures are needed. Techniques for gathering information for procedures will be discussed. Several sample procedure formats will be presented along with the pros and cons of each. Ten rules for step development along with words to avoid will be discussed.

Definitions for each of the following procedure elements will be provided:

1. Procedure steps
2. Notes

3. Warnings

4. Cautions

A typical procedure review and approval process will be explained.

Outcomes: At the end of this presentation, you will:

- Understand why we need procedures
- Be able to explain how to identify the procedures needed
- Be able to select the appropriate procedure format for you organization
- Be able to describe the elements of a procedure
- Be able to explain a typical procedure review cycle

Effective Assessment: How do we know what they know?

Jenn Dupre, Mississippi State University

How do you know that students have mastery of content? Quality, effective testing can provide instant feedback on student learning. These objective, learner-centered assessments can identify the learners' ability to apply gained skills to real-world scenarios as opposed to their ability to "take a test."

Outcomes: Create a mock assessment

Developing Hands-on Lab Assessments

Dorothy Ortego, LyondellBasell

How do you determine if the person you are training really understands and can perform hands-on activities correctly? What methods can be used to evaluate hands-on activities? How do you as an evaluator remain consistent. This workshop walks you through the steps necessary to help you create a great assessment tool.

Outcomes: Practical methods to develop assessment hands-on activities and evaluate

Digital Tools for Learning

Jenn Dupre, Mississippi State University

Technology has morphed the learning environment in new and surprising ways that can enhance or hinder the learning process. In this session, we will investigate some of the current digital tools (both paid and free!) available and the benefits and drawbacks they may have on meeting educational goals and objectives.

Outcomes: Familiarity and Comfortable with new Digital Tools

Engaging Your Students (so they stay awake and LEARN!)

Elisa Martin, College of the Mainland

Participants will gain basic knowledge of uncertainty and risk assessment, how they can benefit operators in the field, and how they can be incorporated in the PTEC curriculum. Topics include: value of information, risk attitude, expected value, and decision making process.

Outcomes: To give Instructors more tools to keep their students engaged while learning.

Enhancing Presentations Using Learner Preferences

Charles Baukal, Koch Engineered Solutions Institute

Guidelines will be provided for instructors to increase the effectiveness of their presentations based on learner preferences. It will show how to determine learner

preferences and what types of multimedia to use for each type of learner preference. Students learn better when their learning preferences are utilized.

Outcomes: At the end of this session, participants should be able to discuss learner preferences and to select appropriate multimedia for a given learning context.

Getting the Most from Your Simulation Software “Tips from the Experts!”

Martha McKinley, NAPTA TSC Coordinator

Join this discussion group to hear ideas and best practices, from industry and design experts, for using the simulators to enhance your student’s ability to recognize and address process problems. Hear experts discuss their ideas for teaching using a simulator. Take this opportunity to ask questions of the panel to gain understanding and help with applicability in your program.

Outcomes:

- Gain ideas for simulator exercises
- Better understanding of how to use the simulator in the classroom

Goals, Objectives, and Outcomes. Oh My!

Lara Threet, Mississippi State University

Effective goals, objectives, and outcomes are not only used to give students an idea of the expectations of the course but are also used as measuring tools for instructors and curriculum designers. This presentation is for anyone who develops curricula, teaches, or wants to create effective, engaging instruction.

Outcomes: Develop effective outcomes, goals, and objectives for the classroom. Discuss why we should create effective goals, objectives and outcomes. Outline how to use effective goals, objectives and outcomes to our advantage. Describe components of meaningful goals, objectives and outcomes.

Intro to Learning Management Systems (LMS)

Jenn Dupre, Mississippi State University

Do you use an LMS like Canvas or Blackboard? Although these feature-rich tools can seem overwhelming, they can serve as a useful tool to trainers and instructors with just a little know-how. Learn how to use your LMS system to make your job easier (and grade / data reporting automated!)

Outcomes: Familiarity and Comfortable with LMS basics

Kirkpatrick’s Levels of Evaluation

Earl Brown, Industrial Psychologists Inc.

This workshop will discuss the five levels of evaluation:

Level 1 – Measures trainee’s satisfaction with the training

Level 2 – Knowledge retention is assessed

Level 3 – Evaluates how the trainees can apply the training concepts

Level 4 – Measures if the training results in impacting the business

Level 5 - Attempts to quantify the level of monetary benefits to the organization

Outcomes: Participants will acquire a better understanding on training evaluation.

Learning Environment – Preparation & Delivery

Mike Kukuk, Troubleshooting Resources

Creating and maintaining a positive and effective learning environment for our classes is a common target for instructors. Workshop participants will explore the following areas associated with the learning environment: describe an effective learning environment, factors that affect it, how to create it, and how to maintain it through the delivery of classes. Discussion will include: instructor performance, learner behaviors, facilities, materials, activities and interaction, and tips for positive outcomes.

Outcomes: Participants will make the connection between the factors that affect the learning environment and how an effective learning environment can be created and maintained.

Making Learning Fun with Group Interaction

Dennis Link, College of the Mainland

This workshop will be centered on the theme that engaging participants in fun, interactive activities is directly related to the amount of learning taking place. We will involve the participants in group activities related to safety, crude oil refining and process unit startup.

Outcomes:

At the end of workshop, participants will be able to:

- Share safety tips to help eliminate injuries
- Facilitate interactive learning activities with small groups
- List the key differences in a barrel of crude oil and a barrel of refined oil
- Place process unit startup procedure steps in the proper sequence to ensure a safe, environmentally sound and efficient startup

Refresher Training Benefits and Applications for Industry and Education

Earl Brown, Industrial Psychologists Inc.

Is "Once Trained - Always Trained" the way to go or is Refresher Training Needed? This workshop will address why we need refresher training. Also addressed will be when we would need refresher training. Signs refresher training is needed will be discussed. Methods for identifying refresher needs will be explained. One method of providing the OSHA PSM required refresher training will be presented and discussed.

Outcomes: Participants will acquire a better understanding of refresher training requirements and process

Risk Assessment for Process Operators

Vahid Atashbari, Southern University in Shreveport

Participants will gain basic knowledge of uncertainty and risk assessment and how they can benefit operators in the field. Topics include: value of information, risk attitude, expected value, and decision making process. These skills are required in any occupation, especially in the field where an operator faces uncertain condition and must make right decision.

Outcomes: Upon completion of this session, participants will be able to incorporate the concepts of uncertainty and risk assessment in class activities and PTEC curriculum.

Teaching PTEC Core Courses - Best Practices

This eight-part workshop track is designed for college Process Technology Instructors and Department Chairs. The participants will interact with their table groups to identify, discuss and prioritize best practice learning techniques associated with the core Process Technology course highlighted during each workshop. Participants will receive certificates of completion indicating each of the eight workshops attended

Outcomes:

At the end of each of the eight workshops, participants will be able to:

- Identify best practice learning techniques to enhance their Process Technology core courses
- Share best practice learning techniques they currently use in teaching their Process Technology Core Courses
- Implement best practice learning techniques into their Process Technology core courses to improve their programs

Teaching PTEC Workshops:

Introduction to Process Technology

Process Systems

Process Equipment

Process Quality

Safety Health and Environment

Process Operations

Process Instrumentation

Process Troubleshooting

Teaching Troubleshooting – An Effective Recipe

Mike Kukuk, Troubleshooting Resources

This workshop will address critical components for teaching process problem solving, using broadly accepted training practices, in an interactive environment. Content includes prerequisites, desired outcomes, troubleshooting method and tools, and a participant demonstration of the application of the troubleshooting process.

Outcomes: Participants will be able to apply a structured troubleshooting approach to solve a simple process problem and recognize the value in a structured process coupled with standard training practices.

Using Engineering Systems Design Principles for Curriculum Development

Lara Threet, Mississippi State University

Curriculum development is like other tasks in research, design, and development. Applying similar principles to curriculum design is a way to take current knowledge to different fields. Effective curricula is imperative to pass knowledge to the next generation. This presentation is for anyone who develops or wants to develop curricula.

Outcomes: Define systems engineering design philosophy and methodology. Define curriculum development. Apply engineering design philosophy and methodology to curriculum development.

Keep checking back, there's more to come!!!