

**NAPTA Instructor Skills Conference XI**  
**Wed-Fri October 27-29, 2021**  
**Galveston Convention Center**  
**Galveston, TX**

## **ISC XI 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

### **Auditing Your PTEC Program for NAPTA Endorsement**

**Dorothy Ortego, LyondellBasell**

Is your PTEC program interested in becoming endorsed? How do you prepare for an audit? What information will the auditor be looking for? This presentation walks through what your school needs to prepare for an audit and discusses the online audit tool process.

**Outcomes:** Review the NAPTA audit tool. Discuss school responsibilities for audit preparation for initial audits with a site visit and online re-endorsements.

### **Augmented Reality for Process Heater Training**

**Dr. Charles Baukal , KES/John Zink Institute**

Augmented reality (AR) has great potential to enhance learning because the learner is actively involved in the experience without the inherent danger of training on operating equipment. This session will show an example of how AR can be used in the classroom.

**Outcomes:** Define augmented reality, discuss possible classroom uses, demonstrate an example use

### **Best Practices to Train and Qualify Operators**

**Curtis Briggs, INEOS**

Participants will discuss best practices for training operators from onboarding to qualification.

**Outcomes:** Learn best practices from industry partners concerning training and qualify operators.

**Best Practices Using Simulators in Process Technology & Industry Training Programs**  
**Martha McKinley, NAPTA TSC Coordinator**

Join this discussion group to hear ideas and best practices, from industry and design experts, for using the simulated environment to enhance your student's ability to recognize and address process problems in the unit. Hear experts discuss and relate their ideas for teaching using a simulator. Take the opportunity to ask questions of the panel to help 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

**Bias Awareness**

**Mae Francis, Lookin' Up Consulting**

Through discovery learning, activities and dialog we will embrace the idea that we each have biases. We will explore the causes and effects of biases and determine creative ways to eliminate them.

**Outcomes:** Participants will leave with a simplified understanding of bias and a personal call to action

**Communicating in a Digital World – Technical Writing for Process Industries**

**Sarah Grace Mitchell, CORYS Inc**

Technical writing has its own unique place and purpose, and can be challenging to master, as it is a form not usually taught in schools. This presentation will cover technical writing tips, including how to effectively use email. In this session, we will use a technical training manual to show participants examples of good technical writing in a training context.

**Outcomes:** Participants will learn techniques for more effectively communicating technical topics in a industry environment.

**Creating Valid Test Questions Linked to Objectives and Content**

**Cathy Williams, Williams-Foster Consulting**

Participants will be able to recognize common testing errors and apply "Test Writer Guidelines" to evaluate existing test questions. Participants will apply the "Five Key Points" model to create effective written and performance test instruments.

**Outcomes:** 1. Recognize effective test questions. 2. Apply a process to create effective test questions.

**Developing and Championing a Diverse Workforce (Panel Discussion Group)**

**Michael Kukuk, Troubleshooting Resources**

The panelists will provide multiple perspectives around diversity and inclusion based on their work and personal experiences. The information will range from recruiting to evaluations and promotions, to training, including day-to-day situations. Sharing this knowledge, along with the responses to participant questions, and sharing by the participants, is intended to assist the participants with their goals related to a more diverse and inclusive workforce.

**Outcomes:** Panel Discussion will highlight issues around diversity and inclusion provoking ideas on how the participants can adjust their practices and behaviors and move closer to being Champions for Diversity and Inclusion.

### **Developing Critical Thinking Skills for Operators**

**Don Glaser and Matt Garvey, Petroskills-Simulation Solutions**

This workshop will address creating and delivering simulator-based exercises that promote critical thinking for PTEC students and plant operators. Attendees will partake in exercises that they can bring back to their own institutions with or without a process simulator. An emphasis is placed on knowledge transfer and instructional design methods to capture and store process knowledge.

**Outcomes:** The demonstration of a systematic approach to creating critical thinking exercises that promote knowledge transfer within organizations.

### **Five 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.

### **Hands-on Training 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

### **How to Present Complex Concepts to Diverse Audiences**

**David Wright, Dale Carnegie**

You will receive guidance, tools, and techniques for simplifying complex information when presenting to diverse audiences. You will explore processes and strategies to make complex information clearer and more compelling. You will receive best practices for support materials, visuals, and presentation delivery that will prepare you for tomorrow’s communication needs.

**Outcomes:** Get your point across and help listeners understand a difficult concept by making it relevant and understandable.

## **I'll Take Learning for 500: Using game shows to engage, motivate, and train**

**Dan Yaman, LearningWare**

Game Shows are an effective way to increase comprehension. Attendees will learn how to implement game shows during classroom and virtual training, write questions, choose the best game show for the content, host, judge and more. Participants will get a hands-on game show experience with a variety of game formats.

**Outcomes:** Learn to use game shows to maximize engagement, comprehension & retention

## **Integrating Technology into PTEC and BOT Programs**

**David Hirsch, Systran Inc.**

Technology presents new opportunities to engage learners. Adopting and sustaining technology-driven learning tools is a continuing challenge for both business and industry organizations. This workshop will explore considerations prior to selection, steps to ensure successful adoption, and best practices for long-term sustainability. The goal is to ensure these tools deliver on their ROI, for the learner and the organization.

**Outcomes:** Describe considerations for selection, adoption, implementation, and sustainability of technology-based learning tools

## **Introduction of Instructional Systems Design (ISD) using the ADDIE Model**

**Cathy Williams, Williams-Foster Consulting**

Participants will be able to apply the steps required to complete each phase of the ADDIE Model (Analyze, Design, Develop, Implement, Evaluate) to create effective training programs. The workshop will focus on Analysis and Design Phases to emphasize the steps required to identify "need-to-know" content.

**Outcomes:** Upon completion of the session participants will know how to identify the steps of the ADDIE Model and understand the potential problems when the model isn't used correctly.

## **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.

## **Presentation Skills**

### **Vicki Newby, Lamar Institute of Technology**

Many of us have been successful developing our presentation skills, this presentation reviews some time proven methods of keeping your presentation fresh and interesting to your students and business associates. Great presenters are always looking at ways to become better. What skills work, what mannerisms distract, what do we do instinctively that we should do purposefully? Those are questions that this presentation hopes to address in a fun and engaging manner

**Outcomes:** At the end of this presentation the participant will be able to:

1. Demonstrate presentation methods that work.
2. Discuss ways to ensure your presentation meets the expectations of the students, supervisors, and yourself

## **Process Technology Apprenticeships and Internships-Building a Pipeline**

### **Alisha Nash, Dow Chemical**

Join this session to hear about the difference between Apprenticeships and Internships Participants will learn the importance of and best practices about Apprenticeships and Internships. and their importance in building a pipeline of PTECs for industry. We will discuss the benefits to companies, Apprenticeships and Internships: Building a PTEC Pipeline colleges and students. We will also share a successful example of both programs. There will be opportunities for questions and idea sharing throughout the session

**Outcomes:** Participants will learn the value of and best practices about apprenticeships and internships

## **Process Safety Management – Best Practices**

### **Mark Briggs, Area Director - OSHA**

The OSHA Houston South Area Office PSM Team headed by Mr. Mark Briggs (Area Director) and Mr. Mhekeba Hager (PSM Team Supervisor) will present on best practices in PSM in a discussion group type setting.

**Outcomes:** An understanding of OSHA's expectations for PSM compliance within industry.

## **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

## **The ROI of Needs Assessment**

### **David Hirsch, Systran Inc**

Organizations often create or purchase training as the solution to a perceived performance gap without taking the time to perform a training needs assessment. This

session helps attendees understand how training needs assessment defines the performance gap, ensures that training is the solution, describes best practices for conducting needs assessment, and identifies the best method to address and close the performance gap.

**Outcomes:** Describe the purpose, benefits, major steps and best practices for conducting a Needs Assessment.

### **The 7 Habits of Highly Effective Instruction**

**Darin Hoggan, Franklin Covey**

The 7 Habits have been making leaders more effective for over thirty years. What happens when the same principle-based concepts are applied to instructing and facilitating? When you present you get one chance to make an impact, come learn how to make it count.

**Outcomes:** Learn practical tips for being a more effective instructor, facilitator and Presenter

### **Teaching PTEC Core Courses - Best Practices**

This four-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 two core Process Technology courses highlighted during each workshop. Participants will receive certificates of completion indicating each of the four workshops attended

#### **Workshop I**

**Jon Leacroy – College of the Mainland**

Safety, Health, and Environment

Introduction to Process Technology

#### **Workshop II**

**Derrick Lewis – College of the Mainland**

Process Equipment

Process Instrumentation

#### **Workshop III**

**Karen Kupsa – College of the Mainland**

Process Systems

Process Quality

#### **Workshop IV**

**Jack Berry – College of the Mainland**

Process Operations

Process Troubleshooting

#### **Outcomes:**

At the end of each of the four 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 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.

### **Virtual Process Troubleshooting**

#### **Don Glaser and Matt Garvey, Petroskills-Simulation Solutions**

The session will focus on converting traditional in person troubleshooting exercises to a remote instruction format. An emphasis is placed on creating a modular library of troubleshooting exercises to ensure flexibility of delivery. Best practices of virtual troubleshooting delivery will be discussed including maintaining and tracking NAPTA objectives.

**Outcomes:** Exposure to best practices for remote troubleshooting instruction to maintain the "hands-on" element critical to process troubleshooting.

**NOTE: *Participants requested to bring personal laptop, iPad or iPhone to use for "hands-on" workshop activities***