

# Technician Training Joint Industry Project

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# Overview

- General Course Outline and Concept
- Examples of Simulations and Rapid eLearning
- General Development Plan
- Why join a JIP?
- Investing in the JIP

# Three Critical Points

- In order to develop a course such as this, we have to understand three critical points.
  1. Developing an effective adult training program is not easy and not inexpensive.
  2. Leveraging funds via the JIP model can achieve success where an internal effort might not.
  3. The training methodology presented is transferable to other technician disciplines.

# General Course Outline

- **Module 1: 40 hours of Computer-Based Training (CBT)**
  - Includes simulations to facilitate understanding of various technical concepts.
  - Includes testing of comprehension.
  - Includes a Learning Management System.
  - Developed using a rapid authoring tool.
- **Module 2: 4 Weeks (Full-time) Classroom Training.**
  - This may be delivered in-person, via web-based format, or via DVD.
- **Module 3: 4 Weeks (Full-time) Laboratory Activities.**
  - The laboratory activities will consist of lecture time (1/2 day) and hands-on lab time (1+ days).

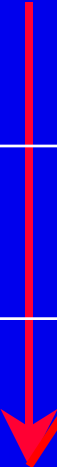




# General Course Outline

- Aimed at High-School Graduates
- Probable Components
  - Basic Computing
  - Basic Math, Electronics, Physics, Chemistry
  - Natural Gas Fundamentals
  - Fluid Mechanics Fundamentals
  - Flow Measurement Fundamentals
  - Basics of Instrumentation and Communication Protocols
  - Basics of Control Systems
  - Basics of Regulators
  - Basics of Flow Meters
  - Basics of Gas Chromatography

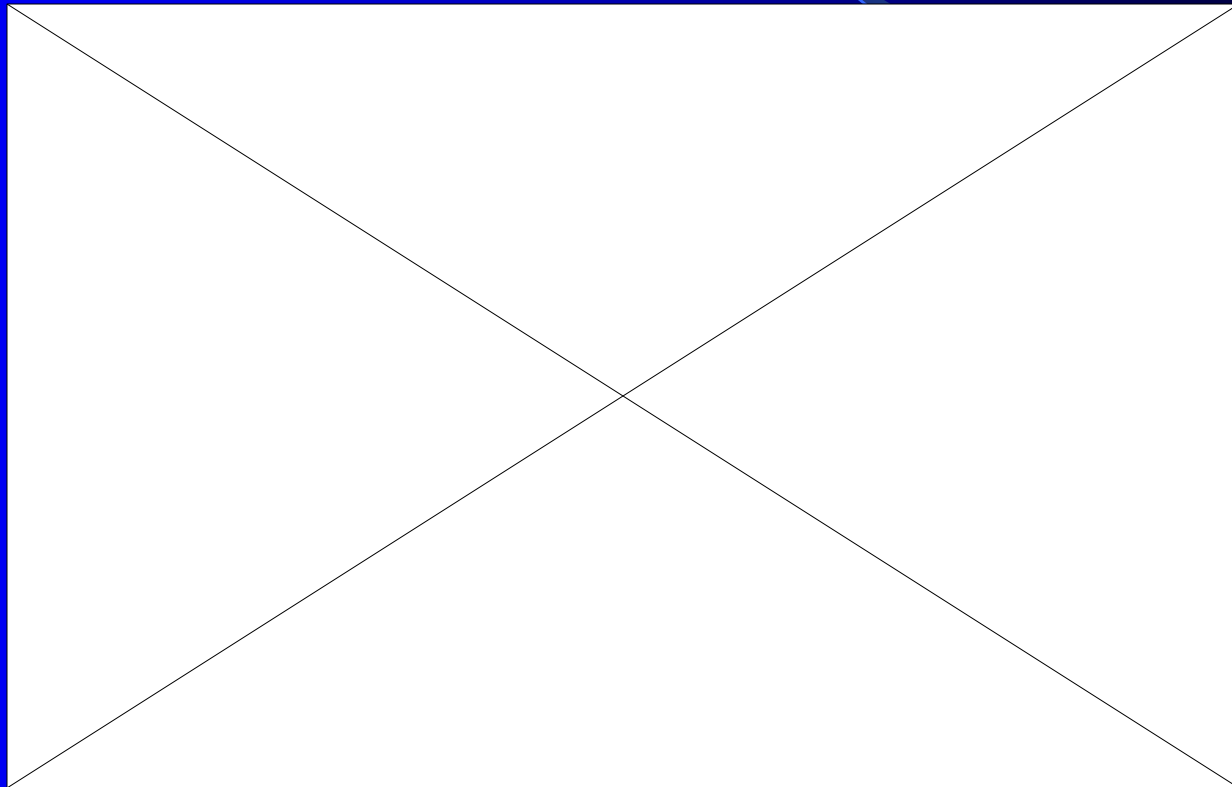
# Course Concept – No Make Up Necessary (Preferred Path)

Lessons	Module I Computer -Based Training	Break (OJT)	Module II Classroom Training	Break (OJT)	Module III Hands-On Training
Lesson 1	↓	↗	↓	↗	↓
Lesson 2					
etc.					
	Gateway Exam <b>(Passed)</b>	Internal OJT Assessment	Gateway Exam <b>(Passed)</b>	Internal OJT Assessment	Gateway Exam & Graduation

# Course Concept – Make Up Required (Failed Gateway Exam)

Lessons	Module I Computer -Based Training	Break ( <b>Make-Up</b> & OJT)	Module II Classroom Training	Break ( <b>Make-Up</b> & OJT)	Module III Hands-On Training
Lesson 1					
Lesson 2					
etc.					
		Gateway Exam ( <b>Failed</b> )	Internal OJT Assessment & <b>Make-Up</b> Exam	Gateway Exam ( <b>Failed</b> )	Internal OJT Assessment & <b>Make-Up</b> Exam

# Simulation Example



# Rapid eLearning Example

<http://www.ptrain.com/demos/articulate/player.html>

# Advantages of the Rapid eLearning Approach

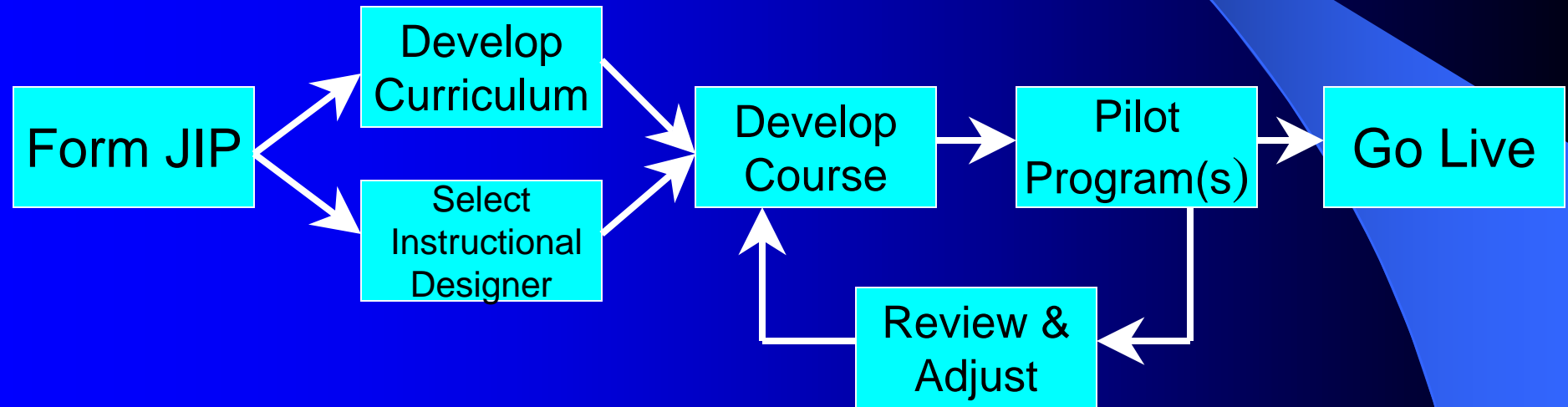
- Based on PowerPoint presentations.
- Runs on any computer with a Flash player (80% of computers already have Flash installed).
- Software is commercially available and easily accessible.
  - Example: Articulate Presenter is ~\$1,500.
- Will not be held hostage by a particular firm or proprietary platform.

# Advantages of the Rapid eLearning Approach

- Invest in the development, then own the material.
- Revise and republish easily and quickly without rehiring the original firm.
- Low cost student progress tracking systems are available.

# General Development Plan

- Basic overview of the development of the course:



# Joint Industry Project (JIP)

The procedure where companies with a common goal pool resources (money) to achieve this objective.

A time-honored practice, it only works when the need is great and there are no competitive advantages sacrificed by the JIP member companies.

Often used in upstream measurement community to evaluate new technologies - e.g. multiphase, USM, ...

Have been especially popular in Europe.

# Why Form a JIP for Technician Training ?

It is in the best interest of all operating companies to have a large pool of well-trained technicians.

- This will produce a “buyer’s market,” i.e. the supply of technicians will match the needs of the operating companies.
- Conversely, without this initiative, companies with good internal training programs will be penalized.
  - These companies will produce well-trained technicians.
  - By doing so, they are providing for the training needs of others, thus are at risk for corporate “raiding.” Because they are responsibly trying to deal with their problem, they risk higher attrition rates.
  - An industry-sanctioned program with participation from every company will eliminate this problem.

# Why Form a JIP for Technician Training ?

The goal - providing each company with a supply of well-trained measurement technicians - can be realized at a fraction of the total cost to each individual company.

- A program such as this will not receive sufficient funding at all companies - creating winners and losers.
- Pooling financial resources to develop the course gives each company access to the latest training methods, and provides a standard level of basic training.

# Why Form a JIP for Technician Training ?

Companies won't need to staff special internal programs. This means no dependence on a single, specialized staff member who would manage this - and might disappear.

Internal resources can be re-directed to focus on other workforce issues, such as Knowledge Management, retention, and attracting new hires.

If this program is successful, the JIP model can be transferred to other workforce training needs.

# Questions or Comments?