

Process Monitoring

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Process Monitoring

Chapter 1

Introduction To Process Monitoring



Process Monitoring

Chapter Description

- Aims
 - Define the conceptual background of process monitoring.
- Expected Outcomes
 - Critically discuss the essentials and benefits of applying process monitoring system for ensuring smooth as well as safe industrial operability.
- Other related Information



Assignment

Discuss and present the effectiveness of monitoring system in the case of Fukushima Tragedy based on the following scopes:

- 1. The specific technical mechanisms on how monitoring system can intervene and eventually change the course of the events!**
- 2. The reduction of radiological effect of the surrounding area.**



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PBL

PBL	HPL	Strategy	Tools
Students form groups to discuss the problem and activate prior knowledge.	People learn by connecting new information to concepts already learned.	Take into account the learner's preexisting understandings and correct any faulty preconceptions in order to prevent future misunderstandings.	<ul style="list-style-type: none"> eLearning coaching protocols Mind mapping Just-in-time videos
Within their group, students develop hypotheses to frame the problem and, assisted by the facilitator, identify issues to be researched.	People are motivated to learn when they can set their own goals and feel in control of their learning.	Identify the zone within which the student is able to work and provide appropriate scaffolding.	<ul style="list-style-type: none"> eLearning coaching protocols Feedback as learning system
Students work individually to discover knowledge applicable to solving the problem.	To learn how to reason, solve problems, and augment knowledge in a field of inquiry, people need to understand facts and ideas in the context of a conceptual framework that facilitates application to real-world problem solving.	Enable students to study multiple examples of the concept at work in order to learn it in depth in authentic contexts.	<ul style="list-style-type: none"> Discussion Forums Search & Discovery Chat Videoconferencing
Students meet in groups to brainstorm solutions and consider the societal impact of alternate solutions to the problem.	People are motivated to learn when they can reflect on their progress and feel increasingly useful in society.	Include metacognitive supports that make visible the learner's reflections and enable the facilitator to provide scaffolding and guide revisions to improve student learning and reasoning.	<ul style="list-style-type: none"> Blogs Wikis Mind mapping Checkpoints

Hofstetter & Mouza, January 7, 2016. The PBL/HPL matrix, presented at the "PBL Classic/PBL New" conference, University of Delaware.



Source: <https://www.flickr.com/photos/mathplourde/24125284062>, Mathieu Plourde

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References

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- **MacGregor, J. F., and Kourti, T. (1995). Statistical Process Control of Multivariate Processes. Control Engineering Practice, 3, 403 – 414.**



Authors Information

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