



 **Software Engineering Institute** | Carnegie Mellon

**PSP Advanced**

**Day Three Agenda**

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PSP Advanced: Day Three Agenda June 2010

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## Class Discussion

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Class discussion

Design Templates	Design Verification
PROBE Methods	Correlation & Significance
Prediction Interval	Confidence Interval
Size Estimation	Earned Value
Planning Performance	

Were you surprised by anything?

Common process issues

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Discuss any issues the students might be having with the new concepts they learned thus far in the course.

### PSP2 and PSP2.1 Common Errors:

- Design and Code Reviews
- review rate > 200 LOC/hr
- review time < 50% of development time (e.g. 50 min in code and less than 25 minutes in code review)
- review checklists not detailed enough
- not taking a break before starting a review not reviewing on paper reviewing at the wrong time of day relying on test to remove a high percentage of code defects
- Checklists are not maintained (You could ask them to provide some kind of change log)

### Common Errors with PSP2.1 Designs

- design time is less than code time
- not using the templates
- operation scenario and test report not complimentary
- Designs are superficial, cannot be verified
- Logic template is too close to code (back to designing while coding)
- Operational scenario not mapped to test cases



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### Class Data Review

Number of assignment submitted	Defects found in design review
Actual development time	Defects found in code review
Time estimating error	Defects found in compile
Design time	Defects found in test
Compile time	Yield
Test time	Productivity
Actual size	Yield vs. Productivity
Size estimating error	
Size vs. development time	
Total defects	
Defects injected in design	
Defect injected in coding	
Defect removal rates	
Compile vs. test defects	

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Open the instructor's tool and walk through the graphs of interest. Don't spend too much time on graphs that haven't really changed since yesterday.

NOTE: You should review these graphs prior to starting the course in order to identify your talking points. Try to point out interesting trends and outliers. Focus on analyzing the graphs, not just reading them to the class. The students will need to understand the difference between just reading a graph and analyzing one in order to create a good Performance Analysis Report at the end of this course.

NOTE: This is same list of graphs from PSP Fundamentals. No new graphs will be added until day 4, because the remaining graphs involve quality and quality will not be discussed until day 3.



## Course Agenda - Day 3

- 8:00 Continental breakfast
- 8:15 Class data feedback
- 9:00 L6: Understanding and Improving Quality Performance
- 10:15 Break
- 10:30 L7: Planning and Tracking Quality
- 11:30 Lab session
  - Program 7 Assignment
- 12:00 Lunch
- 1:00 Lab session (continued)



