



 **Software Engineering Institute** | Carnegie Mellon

**PSP Advanced**

**Day Two Agenda**

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PSP Advanced: Day Two Agenda June 2010

PSP Advanced: Day Two Agenda	
<b>Class Discussion</b>	
Class discussion	
Quality planning	Personal reviews
Size accounting	Checklists
Using Proxies	Review rates
Size estimation	Appraisal vs. test defect density
Effort estimation	Compiling as an objective assessment of quality
Test report	Using the tool
Design Templates	Design Verification
Were you surprised by anything?	
Common process issues	
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This list is many of the different things the student should have learned in PSP Fundamentals. As it might have been some time since some students took PSP Fundamentals, it may be good to walk through some of these topics as a refresher. You will also be able to review PSP Fundamental material as you do the class data review (next slide).

At a minimum you should discuss any Design and Design Verification issues the students have. As this is the only new material covered to date from PSP2 to PSP2.1.

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

Common Program 5 Error:



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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 all these graphs.

NOTE: You should review these graphs prior to starting the course in order to identify your talking points for each graph. 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 2

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- 8:00 Continental breakfast
- 8:15 Class data feedback
- 9:00 L4: Planning and Tracking Commitments
- 10:15 Break
- 10:30 L5: Understanding and Improving Planning Performance
- 11:15 PROBE Methods A & B Tutorial
- 12:00 Lunch
- 1:00 Lab session
  - Program 6 Assignment





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