PMP Exam Performance – Fall 2008 Classes

This report presents and analyzes the performance of four classes who wrote the PMP exam in December 2008. Suggestions are given for additional study and materials which are now apparently required to prepare for an exam which differs considerably from the exams we have seen in the past.

Exam Performance

The data on exam performance presented here has been drawn from two sources. I have a number of reports directly from the candidates. Also, we know which candidates wrote the paper based test, and we can determine who passed the exam. The PMP status of any individual can be checked at https://www.pmi.org/CertApp/Registry.aspx

On December 13 and 19, 2008, 65 candidates wrote the paper-based PMP exam in Regina and Vancouver. One candidate wrote version 6000 of the exam, which contains Chines language aids. The remaining candidates wrote either version 5600 or 5700 of the exam. It is common practice for PMI to administer two versions of the paper exam in a single examination room. The two versions apparently contain virtually the same set of questions, but in different order. There may some differences between the two versions, but they are apparently small.

The table below displays the pass-fail performance, on the paper-based test, of 64 candidate from four PMP Exam Preparation classes.

Paper Based Exam – December 13 and 19, 2008

Class	Number Passed	Number Failed	Percent Passed
Sask Power	14	0	100%
Regina – Public	8	4	66%
Vancouver – Public	12	10	55%
BC Hydro	9	8	53%
Aggregate	43	22	66%

The overall performance is disappointing. By comparison, over the last decade, we have experienced a consistent pass rate in the mid-90% range for exam candidates in Vancouver. For the public subscription classes in Regina, the pass rate has been somewhat lower, especially in recent years. For the five Regina classes, Fall 2005 though Winter 2008, the aggregate pass rate on the first attempt of the exam has been 76%. The historical difference in performance between the Vancouver and Regina classes can be attributed to demographic differences between the two groups of candidates. Among the Vancouver classes there have been greater proportions of people with extensive

project work experience and management experience, and people with university degrees. While there is evidence of these demographic factors at play in the Fall 2008 results, they do not explain the generally low pass rate, nor do they entirely explain the dramatic differences among the groups.

A small number of candidates chose to write the computer-based test. The data we have for these candidates are incomplete, so it is difficult to draw conclusions. There is no way to know if a computer based candidate has written the exam and failed, unless that candidate volunteers a report. Hence there may be a number of unreported failures for the table below.

We believe that there are more versions in play at any one time for the computer-based test, and hence more variability in content from one exam to another. Historical experience suggests that the computer-based and paper-based tests are comparable in content and degree of difficulty.

Computer-based Exam – December 2008 and January 2009

Class	Number Passed	Number Failed	Percent Passed
Sask Power	4	1	80%
Regina – Public	1	2	33%
Vancouver – Public	0	0 ?	?
BC Hydro	0	1 ?	?
Re-writes	1	2	33%

It is interesting to note that the Sask Power group has performed well on both the paper-based and computer-based exams.

Changes to the Exam

Candidates reported that a substantial number of questions in the Fall 2008 exams, both paper and computer-based, were about the processes in the Guide to the PMBOK, and appeared to be taken directly from the guide. There has always been a small number of questions like this in the exam, in the range of 6 to 20 questions. For Fall 2008, there have been reports that as many as 40 to 50 of the questions, and more, were about the Guide. One candidate who challenged the computer-based test for a rewrite, estimated that 70% of the questions required a familiarity with the Guide approaching memorization. Here is the advice from one candidate:

> Understand the 44 processes.
> Master the 10 most important processes.
> Know the INPUTS for each process.
> Know the TOOLS for each process.

> Know the OUTPUTS for each process... and therefore the interactions between the processes

My advice to classes had been not to memorize the Guide. I had suggested that questions about processes could be answered from an understanding of good project management practice, and of the principles underlying the tools and techniques. I did so because in 1995 the then Manager of Certification for PMI made public statements that zero percent of PMP exam questions were taken from the Guide; that exam questions were first developed by practitioners to reflect good practice based on experience and then were reworded to suit the terminology of published references such as the Guide. Feedback from exam candidates has validated my advice; at least up till Fall 2008.

We have to conclude that the nature of the exam has changed. A candidate must be highly knowledgeable in the processes in the Guide, as well as understanding the good practice content that is covered in the Certification Preparation Seminar. This means spending additional reading and study time with the Guide, or with resource materials designed to assist in understanding and remembering the processes in detail. One book which apparently has been very helpful in this regard is described below.

Explaining Exam Success

The performance of the Sask Power class clearly stands above that of the other three Fall 2008 classes as shown in the preceding tables. Part of the explanation is demographic. Virtually the entire group of Sask Power candidates is university educated. They are engineers with substantial project work and management experience – some of them have several decades of experience. The Sask Power group consistently scored highest on the sample exams in class. In general those who succeeded on the exam in the other groups tended to have advanced education and project or management experience. However, education and experience did not necessarily lead to success. There were several instances where English language comprehension appeared to be a factor. One ESL candidate reported finding the terminology of the multiple choice answers to be perplexing in the first writing, but after studying the terminology of the process descriptions from the guide, was able to distinguish among the multiple choice answers in the successful rewrite.

At least 10 of the 18 successful Sask Power candidates used the book *Head First PMP* as an additional resource to study for the exam. Two of the candidates who wrote the computer-based test reported a large proportion of questions on the PMBOK processes. Both of them recommended the book and one them declared that he was not sure he would have passed if he had not read *Head First PMP*. Another group of eight Sask Power candidates recommended the book as an essential supplement to the Exam Prep Seminar study materials, and that it be studied alongside the Guide. Bear in mind that eight of the successful Sask Power candidates apparently did not use *Head First PMP,* and neither did the other 30 candidates who passed.

The candidate who successfully re-wrote the exam, mentioned above, felt that *Head First PMP* was the reason for his success.

Learning and Remembering the Processes

Given the reported changes to the PMP exam, a candidate should now prepare for the exam by studying the processes in the Guide, to the point of recognizing all of the inputs, tools and techniques, and outputs by the names they are called in the Guide. Reciting these items in a lecture would not be useful. People find the Guide dry and difficult to read. There are many commercial books, CDs, sample questions, and even flash cards advertised to assist one in memorizing the processes by using games, mnemonics, and memory aids. It is reported that *Head First PMP* makes this learning process entertaining. I pass on the recommendation of those who have attributed their exam success to this book.

Head First PMP, is written by Green and Stellman, and is published by O'Reilly. Amazon.ca offers it at a good price and has quick delivery.

I suggest that the book be used as an aid to learning the processes in the Guide to the PMBOK, and no more. The book is simplistic and frequently erroneous when it comes to describing project management knowledge and practice. Its descriptions of the critical path method and earned value border on the ridiculous. My suggestion for using the book is to read the corresponding chapters prior to the lectures in class, in conjunction with reading the assigned chapters of the PMBOK. After the class, do the sample questions which deal with processes for that section. You may want to do this in a study group. Here is how the book aligns with the lectures:

Lecture Unit	*Head First PMP* Chapters
1. Framework	1, 2, and 3
2. Scope Management	4 and 5
3, Project Organization	Pages 23 – 28
4. Professional Duties	13
5. Cost Management	7
6.Time Management	6
7. Human Resources Management	9
8. Communications Management	10
9. Procurement Management	12
10. Risk Management	11
11. Quality Management	8
12. Review	14

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