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The BPELSG Chronicles

First Results of Computer-Based Testing for the Professional Land Survey Examination

A new era in how the Board measures the competency of individuals desiring to practice land surveying in this state has begun. The first ever results of computer-based testing (CBT) administration for the California Professional Land Surveyor exam have just been released by the Board. There are many opinions on what format (multiple-choice, design essay, etc.) is the most appropriate for this type of measurement and as you can imagine when it comes to land surveyors, opinions are never lacking. The California Professional Land Surveyor exam has taken several forms over the years. But the underlying goal of the task was the same throughout all these iterations.

In the normal course of our daily activities as land surveyors, we encounter many different “instruments”, all of which are designed to provide us with measurement data so we can make intelligent, educated decisions in regards to accuracy and precision. Over the last century and a half, land surveyors used a variety of instruments that have changed with advancement of new technologies. The one aspect shared by all those generations of land surveyors is what was the expected measurement tolerance, or precision, when using the various forms of equipment. Regardless of when the surveys were conducted or which generational instruments were utilized, land surveyors generally had a preconceived idea for the tolerance level that was acceptable for meeting the minimum requirements of their survey.

The licensing exam is essentially a measurement instrument which serves a very similar purpose. The questions are developed in concert with the published test specifications (http://www.pels.ca.gov/applicants/ls_test_plan.pdf), which was developed as a result of an occupational analysis and that was developed by surveying practicing professional land surveyors throughout the state. Subject matter experts evaluate the test specifications to determine if each question (and the overall exam on a whole) meets the criteria for minimum competency standards. Then when the actual measurements are performed (candidates taking and

answering the exam), those responses are evaluated to determine how accurate the measurements (questions) were in relation to the expected tolerances (minimum competency).

I believe that I can state pretty accurately that many individuals, including those who work at the Board, those who provide expert services to the Board in the form of examination development, those who have diligently provided examination preparatory classes, and those who simply are part of the land surveying profession in California all had reservations on how accurately this “instrument” called an exam would perform using multiple choice format and the uncertainty inherent with implementing CBT delivery methods. After progressing through exam development over the last year and seeing the results of this all too important measurement process, I can easily say that the level of focus, effort and dedication provided by the land surveying experts, Board staff and the CBT vendor proved to be a worthwhile endeavor towards the ultimate goal of fair and appropriate licensure. By the time this article is published, the April 2012 exam results (<http://www.pels.ca.gov/applicants/ap12stats.shtml>) will be public knowledge and I would hope that those previously mentioned individuals share my satisfaction in the process. The team of experts gathered to perform standard setting was representative of a wide range of knowledge, abilities, geographic regions, and experience. One of the better discussions I have had the opportunity to be a part of was when I witnessed newly licensed individuals from the previous April banter with seasoned veterans as they keenly collaborated on the definition of minimal competence as it related to the new test plan specifications. Beginning with these exam results, candidates will only receive a “Pass or Fail” notification. The issuance of a numerical score will be discontinued, in similar fashion as the remainder of the California state exams, as it is no longer relevant to this format. Candidates failing the exam will receive a diagnostic that describes their performance relative to the published test plan.

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While we were not able to attend every preparation seminar throughout the state and provide individual attention to each and every concern, we did attempt to visit some of the scheduled classes, including ones at the recent CLSA State conference, and through CLSA's Central Office coordinated a webinar attended by many members. As 2012 progresses, we hope to be able to reach many more who have an interest in the Board maintaining a successful licensure program and we hope to move towards offering the California Land Surveyor exam more often beginning in 2013. In closing, we appreciate all the feedback provided by candidates and several other individuals and thought we would share some of those comments:

"Testing environment was much better than sitting in a large building with many thousands of other applicants trying to listen to the echoes of the proctor announcements."

"Liked how I was able to skip or mark questions so I could return and review before ending the exam."

"I think the CBT format was much less stressful than the previous format and the manner in which the graphics were distributed helped in easily understanding the questions."

"I think it was the appropriate level of difficulty."

"The testing center wasn't used to having all of the reference materials and calculators. This way of testing was certainly a lot less stressful, which I feel enabled me to stay much more focused throughout the exam - All-in-all, a good experience."

"I think it was a pretty fair test and a good mix of real world problems."

"Even though I had to page back and forth through the graphics pamphlet, it was still easy to read and understand."

"After observing attendees at my exam preparatory classes for many weeks, I can tell you that the people that I thought would pass the exam, did and the ones that did not put in the effort and dedication it takes to prepare, didn't. So from my perspective the exam appeared to be accurately targeted." ❖



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