

ASPE Certification Pass/Fail Determination

The “pass point” (PP) or “passing grade” (PG) for the American Society of Professional Estimators (ASPE) Certified Professional Estimator (CPE) exams is the minimum score which is required to pass each of the certification exams administered by ASPE. The method by which the PP/PG is determined is outlined below.

STEP ONE

Each of the exams is written by either an existing CPE or an applicant. The CPE process allows an applicant to provide questions and problems in their area of expertise should a CPE exam not be fully developed. Prior to the test being distributed for psychometric evaluation, there is a preliminary process by which the exam is reviewed for:

- A. Accuracy—Are the problems, questions and their answers correct? The questions and answers must have complete documentation which provides verifiable back up via product manuals, published papers, textbooks, association (for instance the American Concrete Institute) publications, etc. The problems are reviewed for dimension (if required) accuracy, formulas, and math calculations
- B. Grammar—the test is reviewed by the Certification Board and the CPE administrator in the ASPE national business office for accuracy in proper grammar, spelling and punctuation.

Once each exam has been judged to be in compliance with items A and B above, it is “rated” by a panel of CPEs who are experts in the exam’s scope. ASPE uses a modified version of the Angoff Method to determine the PP/PG for each exam.

STEP TWO

The CPEs and experts independently rate each question on the exam. The ratings are set as the likelihood that a competent estimator with the prerequisite qualifications for applying to the CPE program can answer the question correctly. After the panel rates the questions, they are then provided with the ratings of the other panel members. Each panel member is given an opportunity to change their ratings based on the ratings of the other panel members.

STEP THREE

After the questions have been verified and rated the second time, the mean, or average, score for the entire exam is calculated. The score MUST meet the minimum correct answers to reach the PP/PG which generally reflects 70 percent.

STEP FOUR

Every CPE applicant is encouraged to comment on each question he/she feels is problematic and should be reviewed by the Certification Board. In the field of construction estimating, different parts of the country have different phraseology within a field of work, or a trade in one part of the country may be responsible for a particular scope of work and the same trade will not consider the same scope as a part of their responsibility in another part of the country. For example, sheet metal flashing will be included in the HVAC trade in Arizona, but not in

Oregon. Therefore a standardized test must be written so that an estimator in the Southwest and one in the Northeast can arrive at the same answer for the same question. If the applicant's score borderlines the PP/PG, the entire Certification Committee will review any comments made by the applicant regarding perceived ambiguous questions. If a majority of the Board members agree that a comment which cast doubt on the validity of a questions and/or answer, the applicant will be awarded appropriate points to their grade. Should the applicant provide the Board with sufficient, relevant and accurate comments, the applicant may "earn" a sufficient number of points to pass the exam. The exam questions which are shown to be flawed by such comments are either permanently removed from the test data bank or revised to correct any ambiguity.

STEP FIVE

The tests are graded by an outside service. As a part of the reports sent with the grades, the service provides a listing of questions and the percentage of correct vs. incorrect answers for each problem. Should a question be answered wrong more than 50% of the time, that question will be removed from the process until it is revised to meet the rating requirement.

This method of question/answer review and rating insures that the PP/PG is set empirically rather than an arbitrary "setting" of a percentage required to pass the exams.