



Technical Paper Reviewer Guidelines

The ASPE Certification Team sincerely appreciates your time and attention to this task. Please be sure to alert the Certification Team if you are unable to perform the review, for any reason.

The following information is provided to all Technical Paper Reviewers to ensure that each Candidate receives a precise and fair review. Please follow these Guidelines and the attached Rubric. Make your notes and use the proper Technical Paper Score Sheet. The link is in the original Technical Paper Request email.

By using the proper submittal procedures, your review is linked in your profile and adds to your participation journal. The Certification Team can use this to substantiate your earned PDUs.

How to Read a Technical Paper Submission + Write an Effective Critique

Learning to read a Technical Paper is a critical but rarely taught skill. ASPE prefers its reviewers to use the Three-Pass Approach. The key here is that you should take the time to read through the paper in three passes. Each pass accomplishes specific goals and builds upon the previous pass.

- Pass 1: Should give you a general idea about the paper
- Pass 2: Allows you to grasp the concept of the paper.
- Pass 3: Provides an in-depth understanding of the Paper Topic.

The First Pass

This should be a quick scan of the submission paper and take five to ten minutes. Look specifically for the following details.

- Carefully read the title, introduction and brief description.
- Read the section and sub-section headings only in this pass.
- Read the conclusion.
- Direct your attention to the references.

At the End of the First Pass, you should be able to answer the four Cs:

1. Category: Should be "How to Estimate the Cost of..." (HTETCO).
2. Context: Should reflect the approach to the estimate.
3. Correctness: Does the approach/method appear to be valid?
4. Clarity: Is the paper well written?

The Second Pass

In the Second Pass, read the paper with greater attention to details. Please use constructive criticism and make comments in the margins as you read.

- Look Carefully at the figures, diagrams, drawings and other illustrations in the paper. Pay special attention to the take-off and sample sketch. Do they support the details of the paper? Mistakes in these supporting documents will separate rushed and shoddy work from the truly excellent. ASPE Certification Program standards are high. Put yourself in the place of this Candidate's boss. Is this presentation professional?
- Spelling and grammar is important.
- Math errors are cause for the paper to FAIL. Do not solve the math error. But do indicate the general area where the error is located.

After this Pass is complete, you should be able to grasp the content of the paper. You should be able to summarize the main ideas of the paper, with supporting evidence to another CPE or cost construction individual. This level of detail is appropriate and required for a passing score to be given.

The Third Pass

By the Third Pass you should have a great understanding of the paper presented for your review. This pass requires great attention to detail.

- Identify and challenge every assumption presented.
- Try to identify specifically with the Candidates submission and decide if this is how you would approach or prove this topic.
- Provide advice to the Candidate, on improvements to enhance this Paper.
- Identify the strong points and the weak points.
 - Pinpoint implicit assumptions.
 - Missing documentation to relevant work.
 - Potential issues with techniques.

Review and Evaluation

All Technical Papers should have merit and be professional. ASPE Certification Candidates should strive for perfection. The goal is for each Paper to be publishable in the ASPE *Estimating Today* magazine.

Remember that critical review does not mean negative review. Identify flaws, but try to suggest how to correct them without doing all the work for them. Be constructive. Mention what the paper's value could be, if it were improved. When making evaluations, remember that, occasionally, professionals will have differing viewpoints.

Questions Reviewers Should use for Critical Review

- Has the author demonstrated HOW to perform the estimate?
- Does the author demonstrate estimating knowledge of the subject matter?
- Has the author provided enough technical or trade associated information for the reviewer to understand the subject?
- Does the author's approach reflect an expected level of expertise for a CPE? Would you work with this individual in your place of business?
- Has the author demonstrated how special considerations impact the estimate?
- Does the author's use and interpretation of methodology meet current industry standards? Or is it outdated, leading to invalid results?
- Is the paper well written? Are the details of the estimate complete and accurate?
- Are the organization, spelling, grammar, and style professional?
- Does the paper present a sample estimate? Is the estimate calculated correctly?
- MATH ERRORS = FAIL, even if it is an error in an excel spreadsheet.
- Does the subject matter reference the sample sketch / drawing?

Writing the Critique

As a Technical Paper Reviewer, we ask that you complete a rating based on the score sheet (See example) and to write additional comments. The best practice is to mark the paper and upload it with your comments. If you chose not to do this step, you are required to keep a copy for up to twelve (12) months for reference.

When to Decline

The Certifications Team is advocating for the Candidate and will establish a deadline in which the Reviewer is to complete the review. A good review does take time and attention to detail. If you cannot devote the necessary time to complete the review prior to the deadline, please alert the Certification Team via email as soon as possible. The Paper will be reassigned, and the Candidate will not have an extended waiting period.

Upon inspection of the Paper, you may realize that you are not competent to review the Paper. There will be no judgement. The Certification Team tries to match the papers with reviewers to the best of our ability.

The Certification Coordinator has a list of volunteer reviewers. One goal is to avoid asking the same CPEs to review technical papers too frequently. It serves us all if we share the workload.



Reviewer Score Sheet

Based on the scale (below) you may use this copy of the spreadsheet to note your scores.

- 5-Excellent: All elements were presented clearly and convincingly. No weaknesses or shortfalls.
4-Good: All required elements were presented clearly and convincingly. No weaknesses or shortfalls.
3-Acceptable: All required elements were presented but not entirely clear or complete. Minor weaknesses.
2-Poor: Major weaknesses or multiple serious shortfalls.
1-Unacceptable: Aspects of the Technical Paper are missing entirely or are not supported.

Candidate Name: Candidate No.:

Paper Topic: CSI Division No.:

Table with 3 columns: Score: Reviewer #1, Description, Notes (if applicable). Rows include: Knowledge of Estimating, Demonstration of Estimating Experience, Composition, Addresses Important Elements, Cohesiveness + Continuity, Overall, and a total score row with 0.0 and Score - Reviewer #1.

Comments:

When complete, use the link in your email to electronically submit your finished review. Be certain to indicate: MATH Errors and the publishing quality (is the paper Publishable yes/no).



Primary Trait Rubric for Technical Writing

Trait	Exceptional/Good	Good/Acceptable	Poor	Poor/Unsatisfactory
Content	* Writing is purposeful with logic maintained throughout the entire paper.	* Maintains clear logical subject/ position.	* Subject/position is vague with no unifying Statement. * Drifts or has lapses in logic. * Paper consists of repetitions and redundancies.	* Insufficient writing to show that criteria are met.
Support	* All major points fully developed and supported evenly by specific detail thorough the paper (i.e. explanation, evidence, examples, figures, tables and/or graphs). * Supporting evidence is understandable and well organized.	* All key points developed and supported by specific detail: some key points may be less developed than others (not even or balanced). * Supporting evidence illustrates the key points but may lack depth.	* Some key points are developed by specific detail; some may be general and some may lack depth. * Supporting evidence is minimal and / or note easily interpreted.	* Insufficient or repetitious writing that fails to develop key points. * Lacks supporting evidence and / or supporting evidence is unrelated to key points.
Organization	* Structure is clear, appropriate and effective. * All paragraphs are appropriate and purposeful. * Coherence and cohesion are effectively demonstrated throughout paper. * All points are logically presented and interrelated.	* Structure is clear and appropriate to purpose. * Most major points are appropriately paragraphed. * Coherence and cohesion are demonstrated with appropriate transitions. * Most points logically presented and organized.	* Structure is evident. * May have inappropriate or intrusive transitions that disrupt the progression of ideas. * Some major points appropriately paragraphed. * Has coherence, but lacks cohesion. * May have one or more minor digressions.	* Structure is missing or attempted but not obvious to the reader. * Limited evidence of appropriate paragraphing. * Little structure within paragraphs. * May have one or more major digressions.
Focus	* Clearly sets purpose of paper through introduction or overview. * Effective conclusion that relates to the introduction and unifies the writing.	* Clearly sets purpose of paper through introduction or overview. * Clear conclusion.	* Subject/position identified by only a brief, general introductory statement. * Conclusion is absent or only a verbatim reiteration of the introduction.	* Subject/position (or issue) is unclear.
Word Choice	* Words are used correctly and precisely.	* Acceptable vocabulary. * Words are technologically appropriate.	* Simple vocabulary.	* Incorrect vocabulary.



Primary Trait Rubric for Technical Writing

Trait	Exceptional/Good	Good/Acceptable	Poor	Poor/Unsatisfactory
Sentences and Paragraphs	<ul style="list-style-type: none"> * Usage of sophisticated sentence patterns. * Transitional phrases of sentences are appropriately used to make sequence of the events clear. 	<ul style="list-style-type: none"> * Simple and some complex sentences are used. * Some paragraphing to show sequence of events/ideas. 	<ul style="list-style-type: none"> * Sentence structure is usually correct. * Simple sentences are used. * Little attempt made to paragraph writing. 	<ul style="list-style-type: none"> * Sentences do not make sense. * No paragraphing.
Spelling	<ul style="list-style-type: none"> * Spelling is correct, including complex and irregular words. 	<ul style="list-style-type: none"> * Spelling is generally accurate. 	<ul style="list-style-type: none"> * Frequent spelling errors. 	<ul style="list-style-type: none"> * Spelling errors interfere with understanding.
Punctuation	<ul style="list-style-type: none"> * A range of punctuation including commas, apostrophes, colons and semicolons is used accurately and effectively. 	<ul style="list-style-type: none"> * Periods and capitals are used correctly and punctuation is beginning to be used within the sentences. 	<ul style="list-style-type: none"> * Frequent punctuation errors. 	<ul style="list-style-type: none"> * Insufficient or lacks punctuation. * Incorrect use of capital letters.

Technical Paper Grading Criteria

Excellent = 5 Points

Meets and exceeds all standards. Is free from grammatical errors. Conveys a superior understanding of audience, purpose and context. Has a special quality. Contains thorough, complete and accurate information. Has outstanding visual display. Is well developed and organized. Contains appropriate examples and citations.

Good = 4 Points

A very solid paper that meets the standards for the assignment and engages the reader. May contain some minor flaws. Well written and well produced with a solid understanding of audience, purpose and context. Contains proper citations and examples and is sufficiently well developed and organized.

Acceptable = 3 Points

Is adequate in meeting standards. Does the job, however does not engage the reader. Paper may use generalizations or support points. May contain grammatical errors (no more than one error per 100 words).

Poor = 2 Points

Requires the reader to do too much work to understand or read it. Serious grammatical problems. Incomplete information. Fails to meet an important requirement of the assignment.

Unacceptable = 1 Point

Work not completed or does not address the assignment.