

## FIE Full Paper Rubrics – 05/28/2024

### Research

**Directions for Reviewers:** The rubric consists of three areas for evaluation: (a) *Contents*, (b) *General Paper Mechanics*, and (c) *Reviewer Confidence & Overall Evaluation*. For each item, please provide the author(s) with your reasoning and constructive feedback on how they can further strengthen their paper in the comment box.

Criteria	5 – Excellent	4 – Good	3 – Fair	2 – Incomplete	1 – Poor
<b>Research Questions</b>	Research questions are well-defined within the context and align well with the purpose/goal of the paper.	Research questions are relevant within the context and align with the purpose/goal of the paper.	Research questions are somewhat relevant and lack either the context of literature or are not in full alignment with the goals of the paper.	Research questions are ill-defined and not related to the literature, or are not in alignment with the goals of the paper.	Missing.
<b>Theoretical Frameworks</b> regarding concepts, theories, and/or practices	The theoretical framework is well-defined and aligns with the context, goals, and research questions of the paper.	The theoretical framework is adequately defined and aligns with the context, goals, and research questions of the paper.	The framework is somewhat defined and lacks alignment with the context, goals, and/or research questions of the paper.	The framework is ill-defined and lacks alignment with the context, goals, and research questions of the paper.	Missing
<b>Methods:</b> Established procedures adhere to quality standards for <b>quantitative, qualitative, or mixed methods</b>	The methods are highly appropriate and sufficiently described, adhering to exemplary quality standards and suited well to answer the research questions.	The methods are suitable and described, meet established quality standards, and demonstrate a clear connection to the research questions.	The methods selected are outlined, but lack sufficient detail to evaluate their suitability for effectively addressing the research questions.	The methods are not clearly defined and/or methods are not appropriate to answer the research questions.	Missing.

<b>Results</b>	The results are meticulously described, effectively answering the proposed research questions. Also, the findings are strongly aligned with the body of knowledge and frameworks.	The results are presented and adequately address the research questions. The findings are aligned with the body of knowledge and frameworks.	The results are presented and somewhat answer the proposed research questions, but lack some details. In addition, the alignment to the body of knowledge and frameworks is lacking.	The results do not adequately answer the research questions proposed and the alignment to the body of knowledge and frameworks is lacking.	<b>Missing [should be transferred to WIP]</b>
<b>Discussion</b>	Findings and implications are articulated providing a comprehensive understanding of study outcomes; Limitations and conclusions advance knowledge and suggest future research directions; The contributions demonstrate a significant impact on the field	Findings and implications are communicated; Limitations and conclusions are considered to suggest future research directions; Contributions are well-described	Findings and implications are somewhat communicated. The discussion lacks one or more of the following: clearly stated findings, limitations or the study, future directions of the research, and/or concisely stated conclusions that advance knowledge.	Findings, implications, or contributions are not clearly stated; Lacking limitations, conclusive comments, and future directions	<b>Missing [should be transferred to WIP]</b>
<b>Relevance to the FIE's</b>	The paper is fully congruent with FIE's mission and vision.	Good relevance	Fair relevance	Limited relevance	No relevance

<b>Advance of the Body of Knowledge</b> in engineering and/or computing education	Exemplary advancement: The paper is timely and advances the body of knowledge excellently.	Good advancement: The paper reasonably advances the body of knowledge.	Fair advancement. The paper somewhat advances the body of knowledge. However, it should be revised to more specifically highlight the contributions.	Limited Advancement: The paper makes a limited contribution to the existing body of knowledge.	No advancement.
<b>Language and Expression</b> in the organization and the IEEE paper template usage	Excellent in language and English expression and the use of the IEEE paper template.	Good in language and English expression and the use of the IEEE paper template.	Reasonable in language and English expression but, could be improved.	Poor, unlikely that it can be sufficiently improved.	Very difficult to understand.
<b>Reviewer Confidence</b>	I have expertise related to the content of the FULL paper and am highly confident in my review.	I have research experience relevant to the content of the FULL paper and am confident in my review.	I have minimal research experience relevant to the FULL paper topic and am modestly confident in my review.	I am a novice to the FULL paper content and somewhat confident in my review.	I am new to the FULL paper content and have no confidence in my review.
<b>Overall Evaluation</b> reflecting the combinations of all review criteria	Accept the FULL paper.	Accept the FULL paper with Minor Revisions; No additional review is required.	Accept the FULL paper with major revisions; will require an additional review to determine accept/reject.	Reject as a FULL paper but may be more appropriate as a WIP. If resubmitted as a WIP, it will need to be reviewed to determine accept/reject.	Reject the FULL paper.