Dear Authors,

The manuscript shows clear improvements in its current form, and I appreciate the revisions the authors have made. At the same time, I still see two areas that are particularly important and would benefit from further attention.

Comment 1: In the introduction, a more detailed and up-to-date theoretical framework is needed about the importance of integrating science and math education.

How Addressed:

Thank you for this feedback. We agree that a theoretical framework is an essential part of empirical research articles. However, our paper is a policy review. When deciding what sections to include in our article, we followed the structure of other reviews of research published in top-tier journals, such as:

Evans, C. (2013). Making Sense of Assessment Feedback in Higher Education. Review of Educational Research, 83(1), 70-120. https://doi.org/10.3102/0034654312474350

We found that other reviews did not include theoretical frameworks.

Comment second round: Thank you for your response and for clarifying the rationale behind the structure of your review. I understand that policy review articles do not always include a separate section explicitly labelled as a theoretical framework. However, I would still encourage the inclusion of a more explicit and up-to-date conceptual or theoretical grounding in the introduction. Even in policy analyses, articulating the key theoretical perspectives or conceptual models that inform the interpretation of policies greatly strengthens the coherence and clarity of the review. Given that integrated science and mathematics education is a well-developed field with substantial theoretical foundations (STEM integration frameworks, interdisciplinary learning models, and learning sciences perspectives), briefly outlining these approaches would help readers understand the lens through which the policies are being analysed.

Comment 3: In the Findings, this section is divided into nine subsections, but the analysis in each one feels very similar. They include the same type of description for each document without adding new insights or deeper discussion. As a result, the section becomes repetitive and does not clearly show how each subsection contributes to answering the research questions or advancing the overall argument. I would like to explain with a concrete example: Within the sub-section 3.1.4: NCTM Standards for Preparing Teachers of Mathematics, the authors provide a brief summary of a very comprehensive and detailed document (NCTM Standards). They shortly highlight the main focus areas of the NCTM (2020) standards, such as modelling, applications, and technology use. I think this does not fully capture the depth of the original document. The analysis remains descriptive and lacks critical reflection. As an example, I would say: why integration with science is missing, or what this means for teacher education, and what is the responsibility of policy makers. A deeper, more analytical discussion supported by comparison with other standards would make this section stronger and more insightful. Overall, this section is lacking in depth. It includes mostly descriptive information about different policy documents, mainly listing what each document says instead of providing real analysis or interpretation. It is necessary to clearly explain how these findings connect to each other or what broader conclusions can be drawn from them. There is also little discussion of

why integration between science and mathematics remains limited or what challenges exist in policy and teacher education. As a result, the section feels more like a summary than a critical examination. It would be much stronger if the authors compared the documents, identified common patterns or contradictions, and reflected on the implications for integrated STEM and/or STEAM teacher preparation and educational policy in general.

How Addressed: We used a consistent structure to help the reader follow our findings. We added the suggested additions to our new discussion section. Thank you for these suggestions.

Comment second round: Thank you for your response and for explaining the rationale behind the structure of the Findings section. I understand the intention to maintain consistency across the subsections, and I appreciate that some of the suggested points were added to the discussion. What I am trying to express is slightly different. My concern is not only about where the analysis appears, but about the depth of the analysis within the Findings themselves. At the moment, the section superficially summarizes what each policy document states. While these summaries are useful, they do not yet fully convey the complexity or implications of the policies. Given how substantial and influential these documents are, I think the reader would benefit from a more detailed and reflective structure.

In other words, I believe the findings could go beyond description to draw out the underlying patterns, the gaps, and the tensions across documents, and to show more clearly what these mean for integrated science, mathematics education.