



Peer-Review Report Form

Manuscript Title:	Becoming Mathematics Teachers in the Age of Artificial Intelligence: A Narrative Inquiry into Pre-Service Teachers' Lived Stories of Preparation and Change
Type of Article:	Original Article

FIRST ROUND

Editor

General Comments and Recommendations

The reviewers acknowledge the significance of your manuscript and recommend several revisions to further improve its clarity, coherence, organization, and overall scholarly quality. In addition, you are advised to thoroughly review and validate all references included in the manuscript. Please ensure that all cited sources are accurate, accessible, and retrievable through Google Scholar to uphold the credibility and reliability of the study. Additionally, make sure to include the DOI or website link for every reference whenever available to facilitate verification and accessibility of sources. Furthermore, only sources that are cited within the manuscript should appear in the References section, and all entries listed in the References section must also be cited in the text. For example, if 20 unique sources are cited in the manuscript, then only those 20 sources should be included in the References section. Please also note that repeated citations of the same source within the text are counted as a single reference entry; therefore, the total number of references may be lower than the total number of in-text citations.

Reviewer 1

General Comments and Recommendations

The manuscript discusses a timely and relevant topic on how pre-service mathematics teachers experience artificial intelligence in their preparation. The study has value because it looks beyond simple AI use and connects the issue to teacher identity, readiness, and human-centered teaching. However, the paper still needs stronger methodological clarity and more careful presentation of evidence to make the findings more convincing.

Specific Comments and Recommendations

The study uses only three participants, which may be acceptable for narrative inquiry, but the manuscript needs a stronger explanation of why these three narratives are enough. The authors should also describe the participants more clearly so readers can understand the depth and variation of their experiences.

The methodology needs more detail on how the narratives were analyzed. The paper mentions coding and thematic narrative analysis, but it does not clearly explain how codes were



developed, how themes were finalized, and how the researchers checked the credibility of the interpretation. This is important because the findings depend heavily on the researchers' reading of the stories.

There is some confusion in the research setting and approval process. The participants came from Davao del Sur State College, but permission and ethical discussion are connected to the University of the Immaculate Conception. This should be clarified to avoid questions about institutional access, consent, and ethical review.

The results section is rich but too long and sometimes reads like discussion already. Some parts interpret the meaning of the findings instead of only presenting the narratives. The authors may improve this section by reducing repetition and showing a clearer link between each theme, the participant quotations, and the research objectives.

The discussion repeats many points already stated in the results. It should go deeper into what the findings mean for mathematics teacher education, especially in low-resource or Philippine contexts. The authors should also explain more clearly what is new in the study compared with previous studies on AI and teacher preparation.

The theoretical frameworks are relevant, but they are not fully integrated throughout the analysis. Professional Identity Theory, TPACK, and Diffusion of Innovations are mentioned, but the findings could be interpreted more directly using these frameworks. This would help strengthen the conceptual contribution of the paper.

Some references need careful checking because there are incomplete or questionable citation details, such as placeholder DOI information and possible inconsistencies in journal titles. This affects the credibility of the paper and should be corrected before final submission.

Please indicate your recommendation by checking the appropriate box below.

<u>Decision</u>	
	Accept the manuscript for publication.
/	Reconsider the manuscript after the authors have satisfactorily addressed and complied with the reviewers' comments and recommendations.
	Reject the manuscript, as it is not suitable for publication.



Reviewer 2

<u>General Comments and Recommendations</u>
I appreciate that you focus on a developing and resource-constrained setting in the Philippines. Much of AI research is from rich countries, so this local perspective is very valuable. I have a big observation regarding the focus. Your title says "Becoming Mathematics Teachers". However, when I read the findings and the cross-narrative resonances, the themes (like AI as support, moving from hesitation to integration, human-centered teaching) sound like they can apply to any teacher. An English teacher or a History teacher could say the exact same things. What makes this uniquely about mathematics? Participant 1 briefly mentioned calculus and step-by-step problem solving, but you did not explore the specific nature of math pedagogy deeply enough. You need to connect AI more strongly to mathematics education specifically. You chose narrative inquiry to see how they construct meaning over time. But your data gathering says you only did one interview per participant lasting 45 to 60 minutes. Is one hour enough to capture a "lived story of preparation and change"? Narrative inquiry usually needs prolonged engagement or multiple interview sessions to really get the depth. I suggest you justify why this single interview was enough, or clarify if you also used other data like their lesson plans or journals to support the narratives.
<u>Specific Comments and Recommendations</u>
Title and Abstract The title is clear and engaging. Please check your document formatting. The abstract summarizes the study well, but you might want to add one sentence about the exact theoretical lens you used (like TPACK or Professional Identity Theory) so readers know your framework immediately.
Introduction The flow of introduction is logical. You start from broad AI, to math education, to lesson planning challenges, and then the Philippine context. This is well written. You mentioned that AI can function as valuable support but also has issues like inconsistency in math solutions. This is a very strong point. I suggest you expand a little bit on what specific AI tools are usually available to these students in Davao del Sur State College. You mentioned ChatGPT, Microsoft Math Solver, Canva, and Photomath later in the text, but bringing some of this context earlier will ground the introduction.
Methodology You used 3 pre-service teachers. While 3 is acceptable for narrative inquiry, please describe them a bit more without breaking anonymity. What year level are they? Are they in their final practice teaching phase? This matters because their "professional identity" will be very different if they are in 2nd year versus 4th year. Did you conduct the interviews in English? In the Philippines, participants usually mix English and local languages (Taglish or Bisaya) during interviews. If you translated their quotes into pure English, you must explicitly declare this translation process in the Data Analysis section to ensure transparency.
Results and Narratives The transition from hesitation to integration is a great finding. However, the quotes provided (e.g., "It was like having someone who could explain the lesson anytime..." and "I began to understand that AI should support learning rather than replace the role of the teacher.") feel very polished and somewhat academic. They do not sound like the natural speaking voice of college students. If these were translated or edited for clarity, please say so. It is important in



qualitative research to preserve the authentic voice of the participants. Table 1 is a very good summary. It helps the reader see the cross-narrative resonances quickly.

Discussion

Your discussion connects well with the theoretical frameworks. Tying the human-centered teaching finding to the TPACK framework (Mishra & Koehler) is a very smart connection. You state that the findings support Rogers' Diffusion of Innovations Theory because the acceptance emerged progressively. This is a good insight. In paragraph 285, you mentioned that participants actively developed strategies like verification and contextualization of AI outputs. Please provide more concrete examples in the text of how they verified it. Did they solve the math problem manually on paper first? Did they ask their cooperating teacher? This will make the discussion much richer.

Conclusion and Recommendations

The conclusion aligns nicely with the findings. However, your implications for teacher education are a bit generic. You said institutions need to integrate AI literacy. Since you are writing for experts, can you give a specific recommendation? For example, should the "Technology for Teaching and Learning" subject in the Philippine curriculum be updated to include prompt-engineering for math formulas? Give the readers something concrete to apply.

Please indicate your recommendation by checking the appropriate box below.

<u>Decision</u>	
	Accept the manuscript for publication.
/	Reconsider the manuscript after the authors have satisfactorily addressed and complied with the reviewers' comments and recommendations.
	Reject the manuscript, as it is not suitable for publication.

SECOND ROUND

<u>Decision</u>	<u>Editor</u>	<u>Reviewer</u> <u>1</u>	<u>Reviewer</u> <u>2</u>
Accept the manuscript for publication.	/	/	/
Reconsider the manuscript after the authors have satisfactorily addressed and complied with the reviewers' comments and recommendations.			
Reject the manuscript, as it is not suitable for publication.			