Thank you for the opportunity to respond to the reviewer feedback and revise the article. Given the disparity between reviewers comments and recommendation for minor revisions, we have decided in the main part to focus on feedback that was consistent across the three reviewers in making the revisions.

|  |  |
| --- | --- |
| In the second paragraph ability grouping is discussed as part of a national initiative in New Zealand; explain what this was in more detail (Reviewer A/B) | The practice of ability grouping in New Zealand was a prescribed part of the New Zealand Numeracy Development Project (Ministry of Education (MoE), 2004; 2008), a nationwide initiative from 2000 to 2009. In this initiative, a number framework was developed to categorise student's strategies to solving numerical problems. Teachers used an individual diagnostic interview to assess students' numeracy "stage" and students were then allocated into strategy-based groups according to their numeracy stage. In these strategy groups, students were taught prescribed activities for their stage. |
| Include a section on the PLD – including relational/responsive pedagogy Reviewer A/B/C | In more recent years, a professional learning and development initiative developed within New Zealand, (Blinded for review), focuses on a shift in pedagogy from wide-spread use of ability grouping practices towards complex relational and responsive pedagogy. Within this approach, teachers allocate students to heterogeneous groups based on strengths and capability and students are provided with challenging mathematical tasks to solve. Strength based and capability focused grouping is determined through a broader perspective of what it means to have strengths in mathematics, content, dispositional, or communication based strengths (Kobett & Karp, 2020). Complex relational and responsive pedagogy is focused on communication and participation and the development of children’s ability to use mathematical practices as they engage in productive struggle to collaboratively solve rich mathematical tasks (Author; Cobb et al., 2001; Sullivan et al., 2015). Within this instruction, a classroom culture is developed where students support one another and work collaboratively, establishing and developing socio-mathematical norms to engage in the use of mathematical practices and develop mathematical reasoning, (Cobb et al., 2021) Instruction is differentiated through challenging, open-ended tasks where students work together through a community of learning to productively struggle and think about the mathematics, facilitated by teacher prompts and accompanied with plenty of opportunities for students to make mathematical connections (Bobis et al., 2021) |
| Clarify terminology used Reviewer A/C | Eg., within class ability grouping, this is grouping children within their classroom for instruction on the basis of a notion of ability as a solution for differentiationmaths ability as fixed, (Author; Author; Boaler; 2014; Clarke, 2021 Macintyre & Ireson, 2002; Marks, 2013). In this view, there is a perception that mathematical ability is pre-programmed or is genetically determined (Boaler, 2016; Ollerton & Watson, 2001)Strength based and capability focused grouping is determined through a broader perspective of what it means to have strengths in mathematics, content, dispositional, or communication based strengths (Kobett & Karp, 2020)Complex relational and responsive pedagogy is focused on communication and participation and the development of children’s ability to use mathematical practices as they engage in productive struggle to collaboratively solve rich mathematical tasks (Author; Cobb et al., 2001; Sullivan et al., 2015). |
| Include more detailed information about some of the studies citied in literature review Reviewer A | In the New Zealand context, Author’s study found some teacher support for the practice of ability grouping, out of 102 teachers surveyed, 54 teachers identified ability grouping as common practice within their school but only 12 of these teachers expressed support for this. |
| Include Australasian references Reviewer C | Sullivan, P., Askew, M., Cheeseman, J. *et al.* Supporting teachers in structuring mathematics lessons involving challenging tasks. *J Math Teacher Educ* **18,** 123–140 (2015).Clarke, D.M., (2021). Calling a spade a spade: The impact of within-class ability grouping on opportunity to learn mathematics in the primary school. Australian Primary Mathematics Classroom, 26(1)Bobis J, Russo J, Downton A, Feng M, Livy S, McCormick M, Sullivan P. (2021) Instructional Moves that Increase Chances of Engaging All Students in Learning Mathematics. *Mathematics, 9*(6)  |
| Include further information about the interview instrument Reviewer A | The interview questions relevant to this article are now included in the methodology section  |
| Include further information about the analysis methods for the interview data Reviewer A, B | More information has been added related to the data analysis  |
| Include information about the participants e.g., time of interview, number of years in PDReviewer A, B | There is already a table included in the methodology section which highlights the years teaching and in the PLD. We have clarified that the data is from one individual interview.  |
| Provide an overview of the initial teacher beliefs and practices to have a baseline to compareReviewer A | This was not possible as there was only one interview as now clarified in the methodology |
| Discussion of relational and responsive pedagogies could be elaborated. Reviewer A | Thank you for this feedback, however, this has not been elaborated in the findings as it is not directly relevant to the research question and focus.  |
| Discussion of the Numeracy Development project and ‘narrow domains’ of success further explanation needed to explain what this means.Reviewer A | This has been addressed in the appropriate section  |
| Develop clearer discussion and implications section with more specific points Reviewer A/B | The discussion and implications section has been re-written in parts to highlight the specific points and make these clearer. More detail has been added in some section.  |
| Editing and proof-reading and typographical/formatting issues throughout Reviewer B/C  | These have been addressed through the article. E.g., quotation marks, including participants names for quotes, grammar and editing points.  |