

Appendix B

Search Description

Database	Boolean Description	Applied Filters
ERIC via ProQuest	(‘technologies’ OR ‘technological’ OR ‘technology’ OR ‘digitalisation’ ‘digitalization’ OR ‘digital tools’ OR ‘ICT’) AND (‘mathematics teacher education’ OR ‘mathematics teacher training’ OR ‘mathematics teacher preparation’ OR ‘teacher preparation in mathematics’) AND (‘pre-service teachers’ OR (‘preservice teachers’ OR ‘pre?service teachers’ OR ‘prospective teachers’ OR ‘teacher candidates’ OR ‘novice teachers’ OR ‘teacher student’ OR ‘student teachers’))	(Scholarly Journals) NOT (Reports AND Speeches & Presentations AND Encyclopedias & Reference Works AND Books AND Conference Papers & Proceedings AND Other Sources) 2010-01-01 - 2022-12-31 (Article OR Report) NOT (Instructional Material/Guideline AND Speech/Lecture AND Editorial AND Statistics/Data Report) NOT (feedback (response) AND covid-19 AND pandemics AND student projects AND scores AND design AND grade 5 AND teacher surveys AND grade 6 AND physics AND learning processes AND educational change AND electronic learning AND interdisciplinary approach AND active learning AND scientific concepts AND student surveys AND outcomes of education AND handheld devices AND engineering education AND student motivation AND cooperative learning AND models AND inquiry AND skill development AND validity AND interaction AND student teacher attitudes AND teacher characteristics AND computation AND reflection AND manipulative materials AND classroom techniques AND communities of practice AND high schools AND elementary education AND grade 8 AND visualization AND beliefs AND student attitudes AND pedagogical content knowledge AND thinking skills AND minority group students AND student characteristics AND student interests AND textbooks)
Scopus	(technologies OR technological OR technology OR digitalisation OR digitalization OR digital AND tools OR ict) AND (mathematics AND teacher AND education OR mathematics AND teacher AND training' OR mathematics AND teacher AND preparation OR teacher AND preparation AND in AND mathematics) AND (pre-service AND teachers OR preservice AND teachers OR pre?service AND teachers OR prospective AND teachers OR 'teacher AND candidates OR novice AND teachers OR teacher AND student OR student AND teachers) AND PUBYEAR > 2009 AND PUBYEAR < 2023 AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (SRCTYPE , "j"))	Year: 2022–2010 Articles Final Publication English Journal
WOS	((ALL=(‘technologies’ OR ‘technological’ ‘technology’ OR ‘digitalisation’ OR ‘digitalization’ OR ‘digital tools’ OR ‘ICT’)) AND ALL=(‘mathematics teacher education’ OR ‘mathematics teacher training’ OR ‘mathematics teacher preparation’ OR ‘teacher preparation in mathematics’)) AND ALL=(‘pre-service teachers’ OR ‘preservice teachers’ OR ‘pre?service teachers’ OR ‘prospective teachers’ OR ‘teacher candidates’ OR ‘novice teachers’ OR ‘teacher student’ OR ‘student teachers’)	Year: 2022–2010 Articles English Open Access Education and Educational Research