

INPLASY

Promoting gender equality in education through the use of digital technologies: a systematic review

INPLASY2024100013

doi: 10.37766/inplasy2024.10.0013

Received: 3 October 2024

Published: 3 October 2024

Mouraz, A.; Seabra, F.; Borges, I.; Vieira, C.

Corresponding author:

Irina Borges

irborges@uab.pt

Author Affiliation:

Universidade Aberta.

ADMINISTRATIVE INFORMATION

Support - This review is supported by the DIGENDER2PALOP project, which focuses on gender equality in educational settings in African regions, with an emphasis on the role of pedagogical practices and digital technologies. The funding entities for this initiative are Universidade Aberta and Camões, IP. The host research center, LE@D is financed by national funds through FCT – Fundação para a Ciência e a Tecnologia, I.P., within the scope of the projects UIDB/04372/2020 and UIDP/04372/2020.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2024100013

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 3 October 2024 and was last updated on 3 October 2024.

INTRODUCTION

Review question / Objective What are the impacts of pedagogical practices with the use of digital technologies for promoting gender equality in non-higher education, particularly in regions of Africa?

Rationale Gender equality remains a critical challenge in many African regions, where women and girls encounter obstacles in accessing education, economic resources, and decision-making roles. The integration of digital technologies in education, along with improved pedagogical practices, presents opportunities to bridge these gender gaps by fostering more inclusive learning environments. This review seeks

to examine how these interventions contribute to gender equality in schools, identify strategies that challenge gender biases, and explore how ICTs can empower female students.

Condition being studied The condition being studied is the persistent gender inequality in educational settings, particularly in regions of Africa where girls face significant barriers to accessing education, economic resources, and decision-making opportunities. This study aims to explore how pedagogical practices with the integration of digital technologies in non-higher education can contribute to addressing these disparities. By examining the role of education in promoting gender equality, the study seeks to identify strategies that empower female students,

challenge gender stereotypes, and create more inclusive and supportive learning environments.

METHODS

Search strategy The literature search will be conducted across two databases, Web of Science (WoS), specifically the Social Sciences Citation Index and Scopus, using a combination of relevant keywords and Boolean operators. Searches will be limited to articles published between 2020 and 2024. Key search terms include:

Gender AND (education or school or learning or teaching or classroom or curriculum or pedagogy) AND (digital or online or internet or electronic or technology or media).

Participant or population The review will focus on students, teachers, and school administrators with specific emphasis on gender inclusion and mitigation of gender disparities and their experiences integrating digital technologies into pedagogical practices. Although the study's main interest focuses on African Countries, which justifies giving particular emphasis to the studies conducted in those regions, it is not limited to that context.

Intervention The interventions being studied are pedagogical practices using digital technologies in educational settings (non-higher education) to promote gender equality, challenge gender stereotypes, and foster inclusive environments.

Comparator Our primary objective is not to directly compare interventions but rather to map, synthesize and critically appraise all available evidence on this research question. We aim to gather, analyse, and interpret findings from multiple studies to provide a comprehensive understanding of data, including identifying structures of analysis, trends, gaps, or factors.

Study designs to be included This review will include research articles. Qualitative and quantitative studies will be considered, provided they meet the inclusion criteria.

Eligibility criteria Inclusion Criteria:

-Academic journals; Research articles will be included.

-Articles published between 2020 and 2024.

- Full-text articles focusing on digital education, gender equality, and pedagogical practices (all three aspects under study).

- Focus on non-higher education – primary through secondary education students and/or the

professionals working with them, in a school environment.

- Language: Portuguese, English, Italian, Spanish and French.

- Indexed in the databases Scopus and/or.

- Peer-reviewed articles.

Exclusion Criteria:

-Editorials, errata, articles unrelated to the study topic (what does not focus on early childhood education and primary and secondary education or on teacher training for these levels), and duplicate documents were excluded.

- Articles published before 2020.

- Languages other than Portuguese, English, Italian, Spanish or French.

Information sources Databases:

-WoS (Web of Science) Social Sciences Citation Index

-Scopus

Notice: The search will be conducted through b-on (Biblioteca do Conhecimento Online), a platform that provides access to a vast collection of academic resources. It allows us to search across multiple databases (in this case, limited to WoS SSCI and Scopus) and access a wide range of scientific articles (articles within the aforementioned parameters).

Main outcome(s) The primary outcomes of interest are the impacts of pedagogical practices with integration of digital technologies on promoting gender equality in educational settings. This includes assessing whether these practices:

- Empower female students.

- Challenge and mitigate gender stereotypes.

- Improve access to education for girls and women.

- Foster inclusive and supportive learning environments.

Quality assessment / Risk of bias analysis For the quality assessment and risk of bias analysis in this systematic literature review, the Mixed Methods Appraisal Tool (MMAT) will be utilized. The tool will help us conduct a structured evaluation based on five key criteria.

Strategy of data synthesis This review will adhere to the PRISMA 2020 statement as a general strategy, explicitly stating keywords, the search strategy, Boolean operators used, and inclusion and exclusion criteria, aiming to fulfill all elements outlined in the protocol.

Subgroup analysis Subgroup analyses may be conducted based on factors such as age, geographical location, socio-economic status, and

type of intervention (e.g., specific pedagogical methods or digital technologies used).

Sensitivity analysis When analysing the data and writing the systematic review, all aspects related to research ethics will be respected.

Language restriction The review will include studies published in Portuguese, English, Spanish, Italian and French.

Country(ies) involved Portugal (Universidade Aberta).

Keywords Education, digital education, pedagogical practices, gender equity, gender equality, gender divide, PRISMA systematic literature revision.

Contributions of each author

Author 1 - Ana Mouraz - Responsible for conceptualization, search strategy development, and overall review coordination.

Email: ana.lopes@uab.pt

Author 2 - Filipa Seabra - Responsible for screening, data extraction, and quality assessment. Coordination of data synthesis and drafting of the final manuscript. Input on the methodological framework and conducted risk of bias analysis.

Email: filipa.seabra@uab.pt

Author 3 - Irina Borges - Responsible for screening, data extraction, and quality assessment. Responsible for data synthesis and drafting of the final manuscript. Provided input on the methodological framework and conducted risk of bias analysis.

Email: irborges@uab.pt

Author 4 - Cristina Vieira - Responsible for data synthesis and drafting of the final manuscript. Provided input on the methodological framework and conducted risk of bias analysis.

Email: cristina.vieira@uab.pt