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Quality Teachers for Sustainable Physical Education and Sport

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ABSTRACT	ARTICLE INFO
<p>This paper will report on the What's the Evidence project scoping review findings, which aim to identify indicators of teacher quality from a holistic perspective. This Australian study deliberately deviates from the commonly used professional standards that often only focus on teaching in order to provide a more comprehensive understanding of teacher quality. To achieve this, a scoping review was conducted as the most comprehensive method of examining contemporary research (2011-2021) for indicators of teacher quality. The PRISMA-ScR structure was utilized for the review process, with a team of 11 researchers engaging in multiple screening processes. The original publication total of 20,854 was reduced to 1,078 publications for indicator analysis and coding. Through content analysis guided by our construct of teacher quality, these indicators were categorized into seven sets containing 51 indicator categories. These findings were then explored by teaching areas, including Physical Education.</p> <p>© 2023 ASEAN Journal of Sport for Development and Peace</p>	<p>Article History: <i>Submitted/Received 30 May 2023</i> <i>First Revised 19 Jun 2023</i> <i>Accepted 28 Jun 2023</i> <i>First Available online 12 Jul 2023</i> <i>Publication Date 30 Jun 2023</i></p> <hr/> <p>Keyword: <i>Quality Teachers,</i> <i>Physical Education,</i> <i>Sports,</i> <i>Sustainable.</i></p>

1. Introduction

The increasing global interest in education as a "pre-eminent public good" (Guterres, 2022) highlights the importance of achieving UNESCO sustainable goal number 4, which emphasizes providing inclusive and equitable quality education and promoting lifelong learning opportunities for all (UNESCO, 2022). High-quality education is vital to improve learning outcomes for all students regardless of their characteristics, backgrounds, and locations (OECD, 2001; 2005). Teachers are the most valuable resource for schools and higher education institutions to enhance students' learning outcomes (Hanushek and Rivkin, 2012; Chetty et al., 2014; Jackson and Makarin, 2018), and investing in teacher quality and ongoing professionalism is essential. However, most research to date has been carried out by policymakers (e.g., Hanushek, 1971; Monk, 1992; Podgursky et al., 2004; Rivkin et al., 2001), and we argue that the education profession should drive the impetus to create a more holistic measurement of teacher quality. We acknowledge the need to shift the prevailing economic teacher quality/student performance/merit pay research and policy agenda towards capacity building of teachers through evidence derived from teacher education and professional development, as well as the evaluation of teacher quality through professional standards (Ingvarson and Rowe, 2008). Despite this recent conceptual shift, identifying characteristics that predict teacher effectiveness remains challenging (Biesta et al., 2015; Darling-Hammond, 2000; Gilmore and Kramer, 2019; Haddix, 2015).

The construct of teacher quality adopted in this study includes intellectual, interpersonal, affective, and intrapersonal attributes. It represents a mental abstraction of an idea, informed by a conceptual definition influenced by our position as teacher educators, and allows us to derive an operational definition from the literature to measure the distinctive attributes possessed by quality teachers. As the starting point of our study, we created a classification system to organize the different characteristics of teacher quality that would emerge from the literature, accounting for different aspects and acknowledging their relationships. While this classification system is not the only one that could be created, the construct of teacher quality employed in this study refers to a composite of characteristics, attributes, knowledge, and skills possessed and practiced reflexively by an individual. Since the teaching profession directly impacts the welfare and well-being of other human beings, teacher quality also entails an ethics of care at the individual and group levels, giving the construct a moral dimension.

As educational researchers, we argue that focusing on the intellectual, interpersonal, affective, and intrapersonal attributes of teachers can lead to a more holistic understanding of their characteristics. This scoping review intentionally avoids a narrow focus on teaching quality, aiming to broaden the discussion and contribute to the field by improving student outcomes through valid and reliable studies that have identified indicators of quality teachers.

This study aimed to review relevant research to identify indicators of high-quality teachers, including teachers of Physical Education and Sports. In this study, the term "quality teachers" refers to an individual's composite set of characteristics, attributes, knowledge, and intelligence that are applied reflexively in an educational context. Extensive research and practice in education have shown that being a teacher requires cognitive processing abilities (Bardach and Klassen, 2020; Darling-Hammond, 2000), relationship-building skills (Grönqvist & Vlachos, 2008), relatability (Klassen et al., 2018), and personal responsibility for professional conduct (Klassen and Tze, 2014; Klassen et al., 2018). This study's conceptual definition aligns with these previous works, and the review results highlight current research on teachers' intellectual, interpersonal, affective, and intrapersonal qualities.

2. Methods

To conduct this study, the scoping process followed the PRISMA Extension for Scoping Reviews (Tricco et al., 2018) and was registered prospectively with the Open Science Framework on March 23, 2022. To be eligible for inclusion in the study, publications needed to focus on identifying indicators of teacher quality post-graduation and be related to elementary (primary) and/or secondary school teachers. A search was conducted using the following educational research-focused electronic databases to identify relevant literature: A+ Education, Education Source, ERIC, ProQuest Education, PsycINFO, and SAGE Education.

The search strategies were refined by two members of the research team before being executed by one researcher (WC), and the results were managed using Endnote 20 and Covidence. The search strategy involved using terms in four categories: (i) Population (i.e., teachers); (ii) Concept (i.e., indicators and quality); (iii) Context (i.e., primary and secondary schools); and (iv) Study type (i.e., randomized control trial), as the study focused on research-based studies. This rigorous approach ensured that the included publications provided insights into the indicators of teacher quality for primary and secondary school teachers that are supported by research.

More specifically, the abstract fields were searched using the following terms:

- i. Population
teacher*
AND
- ii. Concept (i.e., indicators)
indicator* OR quality* OR ability* OR skill* OR attribute* OR character* OR trait* OR competencies OR feature* OR properties OR aspects OR elements OR facets OR mannerisms OR habits OR customs
AND Concept (i.e., quality)
quality* OR ability* OR perform* OR achievement OR effective* OR skilled OR skilful OR success* OR competent* OR excel* OR exceptional* OR outstanding OR superior OR advanced
AND
- iii. Context
school*
AND
- iv Study Type
"evidence-based" OR effective* OR treatment* OR intervention* OR outcome* OR "experimental stud*" OR "quasi-experiment*" OR "case stud*" OR "case-control stud*" OR "cross-sectional" OR "cohort stud*" OR observational OR "promising practice*" OR "randomized control trial*" OR interview* OR "focus group*" OR narrative* OR qualitative OR survey OR "pre-experiment*" OR evaluation OR perspective* OR voice* OR experience* OR "grounded theory"

The search was restricted to full-text, peer-reviewed academic journal publications written in English and published between 2011 (when the Australian Professional Standards for Teachers were introduced across Australia) and June 2021. Results were further narrowed down by teaching areas, including Physical Education.

Data Sources

The initial search across the specified databases yielded 33,795 publications. The details of these publications were then downloaded to Endnote 20 and consolidated before exporting

them to Covidence for further screening. Subsequently, 12,941 publications were automatically removed by Covidence due to duplication across multiple databases.

During Stage 1 of the process, the research team (consisting of 11 researchers) manually screened the remaining 20,854 titles and abstracts. Of these, 18,984 publications were considered irrelevant and were excluded from the review. The full text of the remaining 1,870 publications was obtained and imported into Covidence for Stage 2.

During Stage 2, the same research team manually examined the 1,870 full publications, and 792 of these were excluded. The remaining 1,078 publications were deemed relevant to this review. The research team then extracted data about the country where the study was conducted, the methods used, the study population, and the indicators of quality teachers reported

3. Results

The data extracted from the included publications were subjected to a detailed coding process to synthesize the results. The coding process identified 3,607 indicators of quality teachers, which were then categorized into seven sets containing 51 indicator categories based on our construct of teacher quality. Although the study's declared focus was on teacher quality, the indicators sourced from the literature showed that external indicators, teaching qualifications and experience, and pedagogical knowledge are also significant influences in considering what makes a quality teacher. However, for the purpose of this review, the synthesis and discussion will mainly focus on the four indicator sets related to our construct: Intellectual Qualities, Interpersonal Qualities, Affective Qualities, and Intrapersonal Qualities. The strongest presence in the coded data (40%) was from Interpersonal Qualities, which included communication, collaboration, relationship-building, motivation/commitment, and self-efficacy. Affective qualities were also highly prevalent, comprising just over 31% of all indicators, with values and attitudes being the strongest category. The two sets of intellectual and intrapersonal qualities were the least prevalent in the coded data, with both sets combined making up just over a quarter of all indicators. When these results were further scrutinized for Physical Education and Sport, 28 individual articles were found.

4. Discussion

It is important to note that the results may indicate what is easier to measure rather than what is important. Therefore, future studies should investigate how all qualities could be measured, and tools to measure all aspects of teacher quality should be created for a holistic profile of teachers to be generated and for teachers to engage in professional development over their lives to meet the demands of the changing nature of their work.

5. Conclusion

This study sheds light on the intricate process of identifying indicators of teacher quality and demonstrates how these indicators can be rigorously collected. The potential implications of these quality indicators are significant, as they can inform professional development needs for teachers and shape the design of Initial Teacher Education programs. Moreover, the study provides a foundation for further research which could identify the qualities needed of applicants as they enter initial teacher education, potentially leading towards a more sustainable workforce. Additionally, the study's outcomes may offer guidance to designers, practitioners, researchers, regulators, and Government bodies in their efforts to improve the quality of teaching and learning for all students, regardless of their characteristics, backgrounds, and locations.

6. Authors' Note

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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