

# INPLASY

## Effects of Arts-Based Pedagogy on Competence Development in Nursing: A Critical Systematic Review

INPLASY202440071

doi: 10.37766/inplasy2024.4.0071

Received: 17 April 2024

Published: 17 April 2024

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### ADMINISTRATIVE INFORMATION

**Support** - University of Applied Sciences Berlin.

**Review Stage at time of this submission** - Completed but not published.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202440071

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 April 2024 and was last updated on 17 April 2024.

### INTRODUCTION

**Review question / Objective** This systematic review aims to determine if arts-based nursing education meets the criteria for evidence-based practice. It examines the extent to which rigorous research has been conducted on arts-based pedagogy in nursing, with attention to research design, methodological quality, and effect size. As a critical review, this study explores the quality and credibility of quantitative research on arts-based nursing education. The review takes a systematic approach to explore the impact of arts-based interventions on competence development as reflected in quantitative research. What are the reported effects on knowledge, skills, and attitudes resulting from art-based interventions? Is there scientifically robust research demonstrating their effectiveness?

The purpose of this review is to assess the effectiveness of art-based pedagogies in nursing and to support the concept of evidence-based nursing education. It aims to uncover potential methodological flaws or bias, make recommendations for future research, and inform practice in the field.

**Rationale** Conceptual papers and empirical research generally present a positive view of arts-based nursing education and its effects. However, many studies exploring the impact of art-based pedagogy in nursing education lack methodological quality and rigor. In quantitative research on arts-based pedagogy in nursing education, uncontrolled studies with limited internal validity are prevalent. A rigorous evaluation of arts-based nursing education is necessary to determine its impact on learners' knowledge acquisition, skill development, and attitudinal

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changes. Previous reviews have not systematically addressed this issue.

**Condition being studied** This review focuses on arts-based pedagogy in nursing education.

## METHODS

**Participant or population** This review encompasses all forms of training and development for nursing professionals, including secondary education in nursing degree programs and professional development. Secondary education in nursing degree programs as well as professional development are considered. The review also includes studies in which the participants were not exclusively nursing students or professionals.

**Intervention** This review includes studies in which learners receive works of visual art (painting, sculpture, graphics, photography, performance and media art, etc.), performing arts (theater, dance), music, film, or poetry. It also includes studies in which learners themselves create artifacts or actively engage in creative expressions such as theater, dance, narrative storytelling, etc.

**Comparator** Does not apply.

**Study designs to be included** This review encompasses comparative studies with experimental or quasi-experimental designs, as well as non-experimental studies with a one-group pretest-posttest design. Mixed-methods studies are included if they contain a relevant quantitative sub-study.

**Eligibility criteria** This review examines competence development, defined as the process of enhancing knowledge, skills, and attitudes required to effectively perform tasks, with a focus on generic competency domains in nursing, such as professional attitude, clinical care, communication, and collaboration. Studies that solely focus on learning experience and learner satisfaction, as well as research on learning and examination stress, are excluded.

**Information sources** A systematic search for primary research studies is conducted in electronic databases relevant to nursing science, healthcare, and education. The database search is complemented by a manual backward search in pertinent reviews.

**Main outcome(s)** Data is extracted for intervention type, study design, participant characteristics and

sample size, data collection, outcome measurements, and key findings. All studies are assessed for the certainty of evidence and categorized as having positive, mixed, neutral, or negative effects according to the Council for Exceptional Children (CEC) Standards for Evidence-Based Practices in Special Education.

**Data management** Citavi 6.18 is used for data management. Screening is conducted using a review software, the Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI).

**Quality assessment / Risk of bias analysis** The Council for Exceptional Children (CEC) Standards for Evidence-Based Practices in Special Education is the selected assessment tool for this review. The CEC Standards guide the identification of evidence-based practices using 28 quality indicators for methodological soundness of group comparison studies and single-subject studies.

**Strategy of data synthesis** To determine if arts-based pedagogy qualifies as an evidence-based practice, studies beyond the threshold of quality assessment are grouped based on comparable interventions in terms of art form, procedure, and outcome. The study follows the evidence-based classifications established by the Council for Exceptional Children (CEC).

**Subgroup analysis** Does not apply.

**Sensitivity analysis** Does not apply.

**Language restriction** Screening is limited to studies in English language.

**Country(ies) involved** Germany.

**Keywords** arts-based learning; arts-based pedagogy; arts-based teaching; competence development; evidence-based practice; nursing education.

### Contributions of each author

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