



Authentic learning in healthcare education: A systematic review

JuHee Lee, Ph.D, GNP, RN¹ · Juyeon Bae, MSN, RN^{2*} · Moonki Choi, Ph.D, RN³ · Suzanne Campbell, Ph.D, RN, IBCLC⁴

¹ Mo-Im Kim Nursing Research Institute, College of Nursing Yonsei University, Seoul, Korea ^{2*} Doctoral student, Graduate School College of Nursing Yonsei University, Seoul, Korea

³ Department of Nursing Bucheon University, Bucheon, Korea ⁴ School of Nursing, The University of British Columbia

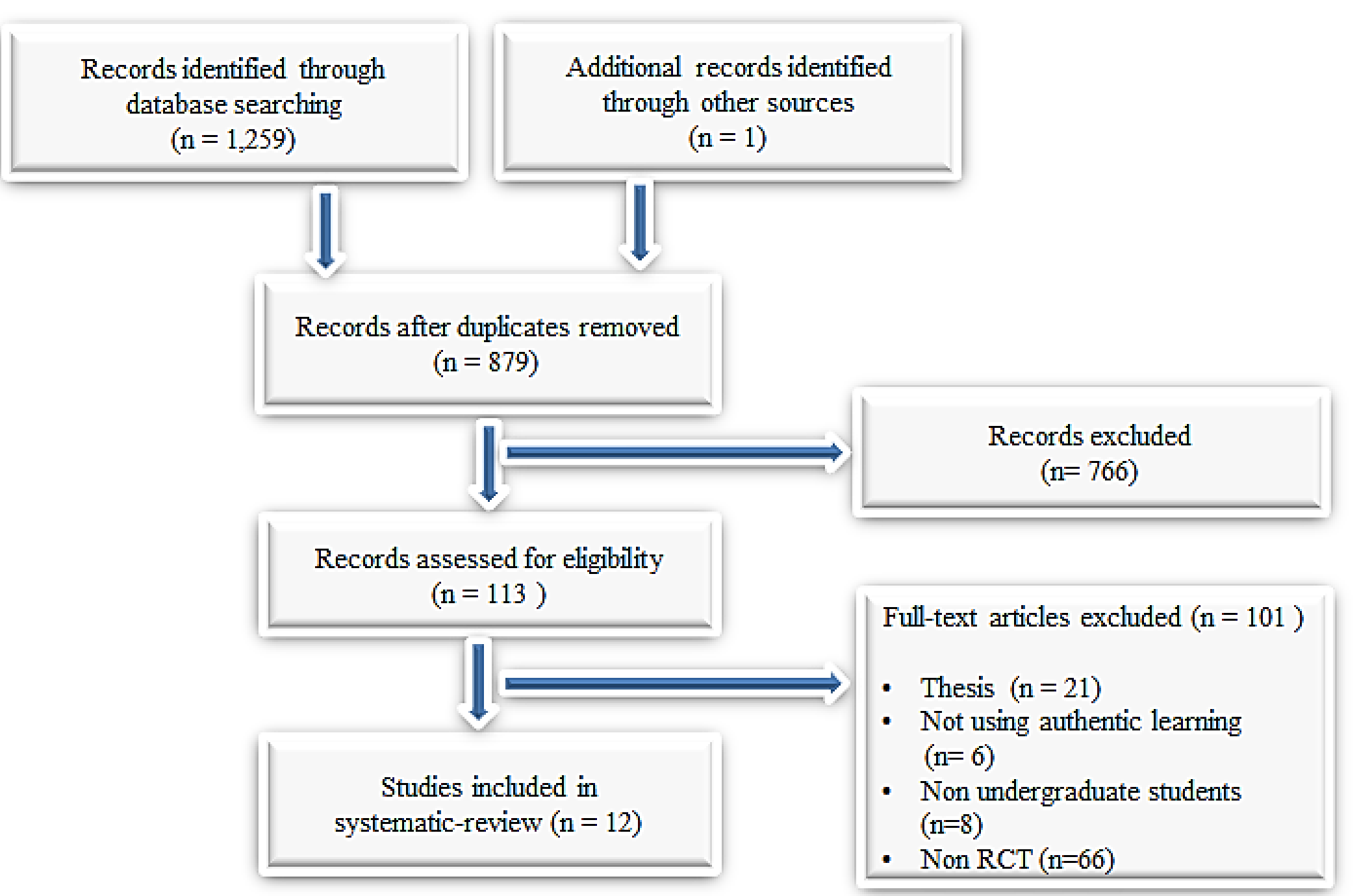
Background and Purpose

Clinical environments are more complex, a higher level of clinical performance is demanded. To satisfy these needs, educational learning methods have been changed. The scientific curricula based on authentic environment were required. **Authentic learning is an instructional approach that allows learners to explore, discuss and construct concept in context that involve real-world problems.** In healthcare education, authentic learning was increasing. However, different authentic learning approaches have developed with little evidence of the effectiveness learning outcomes. The aim of study was to identify and examine the effects of learning outcome on authentic learning method.

Methods

This systematic review study was performed according to the systematic reviews guideline. A literature search was conducted through electronic searching, computerized author searching, and footnote chasing up to June 2017. The twelve studies selected for systemic review (Figure 1).

Figure 1. Flow Diagram for Sample Selection



Results

❖ Study characteristics (n=12)

- Of 12 selected studies, four studies (33.3%) were nursing education, six (50.0%) were conducted within the medicine, two of them were engaged in each of nutrition(8.3%) and kinesiology (5.6%).
- Regarding the research design employed by the studies, six (50%) used randomized trial, six studies (50%) were quasi-experimental design.

❖ Educational methods (n=12)

- Total 12 final articles, nine types of educational methods were used to authentic learning in healthcare provider.
- The virtual simulation, DVD and standardized patient (SP), online cased-based learning (each 2 studies, 16.7%) were the most frequently used authentic learning (Figure 2).

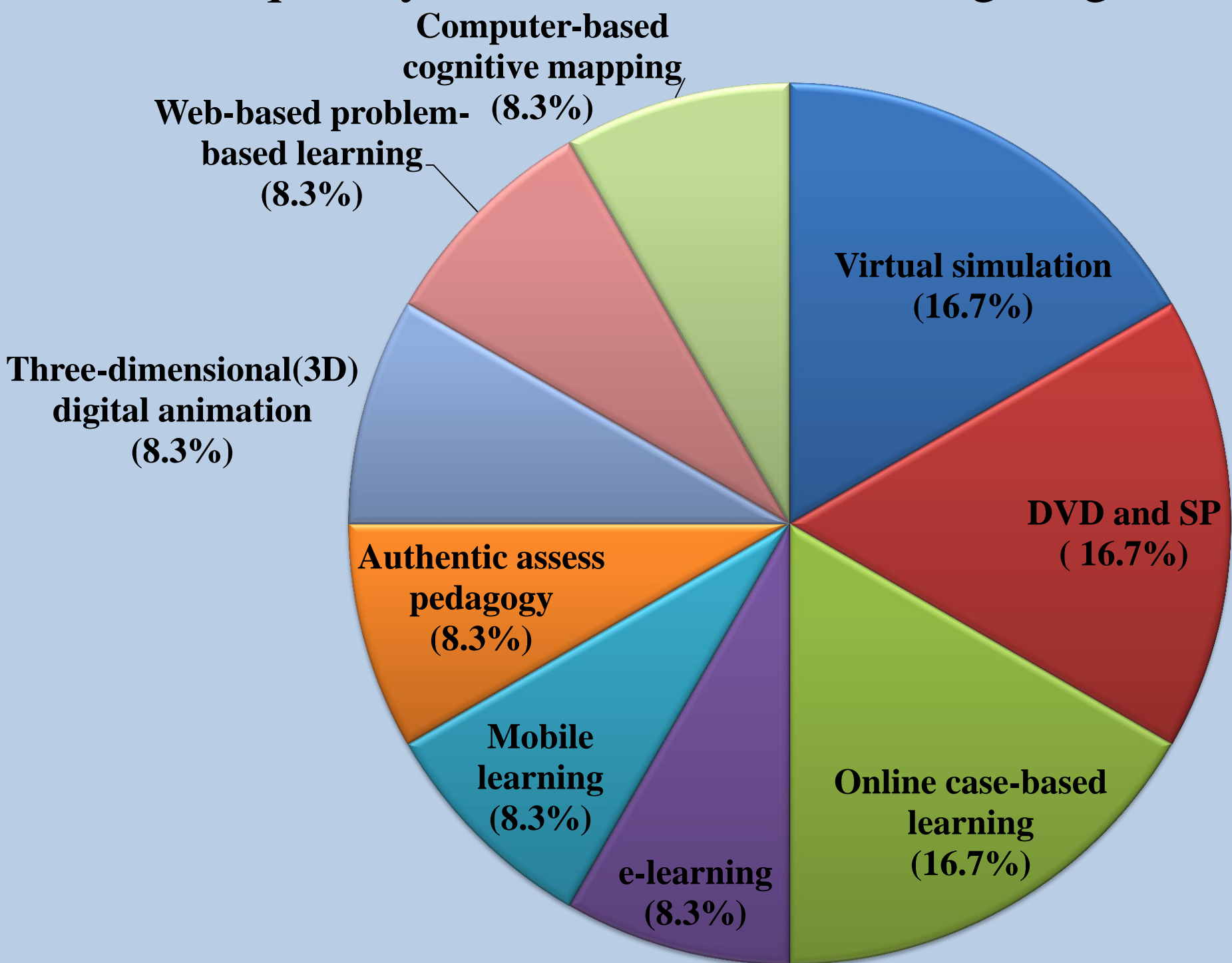


Figure 2. The result of education methods

❖ Learning outcomes (n=25)

- The learning outcomes according to authentic learning were 25 outcomes (Table 1).
- The knowledge was the most frequently used to learning outcomes in authentic learning.
- Especially, e-learning was positive effect to improve students' knowledge.

Learning outcome	Study(n)	Percent(%)
Knowledge	6	24%
Confidence	2	8%
Communication skill	2	8%
Grading point average (GPA)	2	8%
Learner perception	2	8%
Problem solving ability	2	8%
Learning motivation	1	4%
Anxiety	1	4%
Skill competency	1	4%
Critical thinking	1	4%
Satisfaction	1	4%
Learning achievement	1	4%
Attitude	1	4%
Cognition load	1	4%
Examination point	1	4%

Table 1. The result of learning outcomes (n=25)

Discussion

This research represented that authentic teaching and learning methods were generally effective at enhancing learners' cognitive, psychomotor, affective domain of competency. Especially, technology combined such as a web-based or e-learning eliminated academic boundary for education. It provided more collaborative and constructive learning experiences for learners. As a result, authentic leaning contributed positive effect to interprofessional education for healthcare provider.