

## Sigma's 29th International Nursing Research Congress

### Telecollaboration: A Concept Analysis

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**Purpose:** Knowledge and skills for practice in a complex, technologically sophisticated environment is necessary for health care professionals as technology and informatics in health care evolves. With the continued growth of digital technologies and technological pedagogical knowledge, new opportunities for collaborative initiatives and their implementations are set in educational contexts. Therefore, there is a need for clarification of the telecollaboration concept that can be integrated into nursing academia. The aim of this study is to analyze the concept of telecollaboration and propose a definition of telecollaboration that can be used for nursing education. Telecollaboration is a relatively new concept; yet, one that is significant in nursing education. Rodgers and Knafli's (2000) method of evolutionary concept analysis is used to identify the attributes, antecedents, and consequences of the concept.

**Methods:** A literature search was conducted without time restriction on the publication year using PubMed, CINAHL, ERIC, Academic search Premier, Science Direct, OVID, and MEDLINE using the keyword: telecollaboration.

**Results:** Based on the 133 eligible studies, four major attributes emerged: Pedagogical structure, attitude, internet-based tools, and safety and security. Three antecedents are interdependency, teamwork, and communication. Consequences of telecollaboration are metacognition and partnership.

**Conclusion:** A comprehensive definition of telecollaboration is offered as an outcome of this analysis. The findings of this study add to the increasing body of literature about online learning and collaborative behaviors through technology-mediated interactions. Minimal publications were noted in nursing education and emphasize the evidence for the support of the concept in nursing academia. The development of the operational definition of the concept of telecollaboration will promote further concept development and promotion. Further refinement of the concept of telecollaboration will enhance and promote its integration into nursing education. Clarification of telecollaboration prior to using it as a pedagogic tool in the online learning environment will enhance nursing education with the changes in nursing curriculum being implemented today.

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**Title:**

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**Keywords:**

Collaboration, Digital Technologies and Online Education

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### **Abstract Summary:**

With the continued growth of digital technologies and technological pedagogical knowledge, new opportunities for collaborative initiatives and their implementations are set in educational contexts. Therefore, there is a need for clarification of the telecollaboration concept that can be integrated into nursing academia.

### **Content Outline:**

Content Outline

#### I. Introduction

A. Collaboration in nursing is a dynamic process that is essential to promote high-quality patient care and outcomes. Knowledge and skills for practice in a complex, technologically sophisticated environment is necessary for health care professionals as technology and informatics in health care evolves. With the continued growth of digital technologies and technological pedagogical knowledge, new opportunities for collaborative initiatives and their implementations are set in educational contexts. As health care transforms through these innovations, so must academia with well-educated and properly obtained health care professionals.

B. New teaching methodologies in the fields of language have combined the use of Internet communication technologies with online student collaboration to establish technology assisted collaborative practice.

C. The aim of this study is to analyze the concept of telecollaboration using Rodger and Knaff's (2000) method of evolutionary concept analysis to identify the attributes, antecedents, and consequences of the concept and propose a definition of telecollaboration that can be used for nursing research and education.

## II. Body

A. Analysis of the literature resulted in the identification of three antecedents.

1. **Interdependency.** Interaction, engagement, and sharing are the essence of the collaborative process within successful online collaborative learning. Through individual accountability and group interaction, there is positive interdependence.
2. **Teamwork.** Within the team, communication is comprised of open and respectful exchanges of dialogue and mutual understanding.
3. **Communication.** Effective communication of information, ideas, and opinions in open and respectful dialogue exchange.

B. Analysis of the literature resulted in the identification of four attributes.

1. **Pedagogical Structure.** The right ratio of student-centeredness to instructor-driven interactions.
2. **Attitude.** Demonstrate a willingness to explore, learn, participate, collaborate, share ideas, and contribute to the collective construction of knowledge.
3. **Internet-Based Tools.** Internet-based communication tools to host and promote a well-designed safe online learning platforms must be in place.
4. **Safety and Security.** Building trust in technology requires comprehensive safety and security protection to establish a safe learning environment.

C. Analysis of the literature resulted in the identification of two consequences attributes

1. **Metacognition.** Improved problem-solving capabilities, development of self-regulated thinking and learning, and interpersonal growth that allowed learners to master complex tasks successfully.
2. **Partnership.** This partnership occurred among participants, facilitators, and the technology integrated.

## III. Conclusion

A. Telecollaboration describes the plethora of interdependent processes grounded in pedagogical structure that engages participants utilizing internet-based communication tools for the development of metacognition through problem solving, self-regulated thinking and learning through teamwork, and interpersonal growth and partnership development.

B. Telecollaboration can maximize student engagement in the learning experience by using new tools to enhance collaborative opportunities in educational context or professional development. To date, a concept analysis has yet to be found in the literature on telecollaboration. Therefore, there is a need for clarification of the concept that can be integrated into nursing academia.

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