

INPLASY

Studying the Impact of Network Communication Culture and Digital Etiquette on the Effectiveness of Learning and Professional Development of Students in the University's Online Community: a Systematic Review

INPLASY202520115

doi: 10.37766/inplasy2025.2.0115

Received: 26 February 2025

Published: 26 February 2025

Syzdykbayeva, A; Abdigapbarova, U; Aitenova, E; Iminova, Y; Khassanova, I.

Corresponding author:

Aigul Syzdykbayeva

sizdikbaeva-aya@mail.ru

Author Affiliation:

Kazakh National Teacher Training University.

ADMINISTRATIVE INFORMATION

Support - This research is funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. BR21882318 "Customization of the system for developing network communicative culture and digital etiquette among teachers and students in the 'on-line community' of a university"), Scientific supervisor U.M. Abdigapbarova.

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

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202520115

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 26 February 2025 and was last updated on 26 February 2025.

INTRODUCTION

Review question / Objective Research question: How does online communication culture and digital etiquette in online communities (I) affect the interaction between faculty and university students (P) compared to traditional forms of academic communication (C) to ensure effective learning and professional development of students (O)?

Rationale The systematic review is devoted to studying online communication culture and digital etiquette in the context of online interaction between faculty and students in higher education institutions. The main phenomenon under investigation is the influence of online communication culture and digital etiquette on the effectiveness of the educational process and

students' professional development. Before beginning this review, we conducted a search and analysis of systematic reviews published in the Web of Science database from 1975 to 2025. A rapid review of systematic reviews on the topic of online communication in higher education showed that issues of online interaction have already been widely researched in various aspects. Studies focused on the impact of online communication norms and rules on the quality of interaction between faculty and students in the digital environment mainly concentrate on technical aspects of online learning, leaving the culture of online communication and its influence on educational outcomes without proper attention. This review aims to address this gap through a comprehensive analysis of the role of online communication culture and digital etiquette in

ensuring effective learning and professional development of students.

Condition being studied We are studying the impact of online communication culture and digital etiquette between faculty and students in the university's online community on educational outcomes and professional development of students. In particular, we focus on studies that describe, explore or investigate the features of online communication and its impact on the educational process, as well as the effectiveness of learning and professional development of students compared to traditional forms of academic interaction.

METHODS

Search strategy For this systematic review, we use the Web of Science database. The keywords for search are: "network communication culture" OR "Digital Communicative Competence" OR "digital etiquette" OR "netiquette" OR "digital culture" OR "online community" OR "network interaction" OR "virtual community" OR "teacher and university student" OR "online community of the university". The search is conducted in the Abstract, Title, and Keywords fields in the Web of Science database. Search period: 1975-2025. Additional search filters: journal articles, excluding conference materials, dissertations, books, book chapters, and reports. No language restrictions are applied.

Participant or population The participants of this review are faculty members and students of higher education institutions who engage in online communication within the educational process and professional development.

Intervention Interventions include practices of online communication culture and digital etiquette in online communities (for example, ethical code of online communities, rules of online communication, norms of digital interaction, virtual communication culture).

Comparator Comparison is made with traditional forms of academic communication and online interaction without applying the principles of online communication culture and digital etiquette.

Study designs to be included Not reported.

Eligibility criteria Empirical research studies examining network communication culture, digital etiquette, and interaction patterns in online communities between faculty and university

students in the context of professional training are included. The review considers works published in peer-reviewed scientific journals from 1975-2025, regardless of research methodology (qualitative, quantitative, or mixed).

Research participants must exclusively be teachers and students of higher education institutions engaging in digital educational environments, without restrictions on field of study, language, or form of education.

Studies focusing solely on technical aspects of online learning, administrative communication, extracurricular activities, and informal communication are excluded. Works examining school education, vocational education, continuing education, and corporate training are not considered. Publications that only examine digital communication tools without analyzing interaction culture, general issues of distance education without focus on communicative aspects, and psychological aspects of online communication outside the educational context are not included. Conference materials, abstracts, methodological recommendations, reviews without empirical components, and theoretical works without practical research are not included in the review.

Information sources The main source for the systematic review was the Web of Science database. Only empirical peer-reviewed articles from scientific journals studying the influence of network communication culture and digital etiquette on the interaction between faculty and students in university online communities to increase the effectiveness of the learning process and accordingly improve the professional development of future specialists are included. Conceptual and review studies, as well as "gray" literature, are excluded.

Main outcome(s) The main result measured in this study is the influence of network communication culture and digital etiquette on the effectiveness of interaction between faculty and students in online communities of higher education institutions. Measurement is carried out in accordance with the digital communication competence model, which includes online interaction culture, understanding of digital etiquette norms, as well as features of the educational environment in which communication takes place.

It is expected that the findings of this systematic review will have several important implications. The review will highlight the lack of systematic research specifically focused on the impact of network communication culture on learning effectiveness and professional development of students. This gap may indicate the need for future research more

deeply focused on qualitative aspects of online communication in higher education. The review is likely to identify specific digital interaction strategies that significantly contribute to improving learning effectiveness, such as network etiquette norms, principles of academic online communication, and reflective practices in the digital environment. It will also provide information on how these strategies improve the quality of the educational process and students' professional development.

Data management All data was stored in an Excel database created by the authors with division by thematic categories and key research characteristics. The process of selecting and analyzing publications was conducted by two independent researchers. For each publication, bibliographic data, methodology, main results, and conclusions were recorded. Disagreements in assessing the relevance of publications and data extraction were discussed by the entire research group until consensus was reached. To ensure reliability and reproducibility of the selection process, a standardized data extraction form was used, including predefined criteria and categories of analysis. The status of each publication (included/excluded) was documented with reasons for exclusion. The final database was regularly updated and checked for completeness and accuracy of the information entered.

Quality assessment / Risk of bias analysis To minimize bias in this systematic review, a team of five researchers strictly adheres to a predetermined protocol for studying the impact of network communication culture and digital etiquette on the effectiveness of university education.

The research question is formulated using the PICO framework (Population, Intervention, Comparator, Outcome), which provides a structured approach to defining the key components of the review: university faculty and students as the population, network communication culture as the intervention, traditional forms of communication as the comparison element, and learning effectiveness as the outcome.

The research group follows the recommendations outlined in the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). All disagreements about the inclusion or exclusion of studies, as well as their analysis, are discussed collectively by the group.

Strategy of data synthesis The studies selected for review and analysis will be examined using a

narrative approach. First, we will conduct a descriptive analysis to compare the features of network communication culture and digital etiquette in university online communities. Summary tables will be used to present key information, including research design, type of faculty-student interaction, research tools, and research results. Subsequently, we will implement a thematic analysis of the included studies, coding them using a framework of online communication effectiveness and its impact on educational outcomes of university students.

Subgroup analysis Not reported.

Sensitivity analysis Not reported.

Language restriction Not reported.

Country(ies) involved Kazakhstan.

Keywords network communication culture; digital etiquette, online community; teachers and students of the university; academic communication; professional formation.

Dissemination plans This systematic review is planned to be published in a peer-reviewed scientific journal. The research results will be presented to the university faculty and disseminated among researchers in the field of higher education in Kazakhstan. The review will contribute to the development and design of effective models of online communication between teachers and university students, forming a culture of digital interaction in the academic environment. The methodology of conducting the systematic review will be presented to teachers and researchers in Kazakhstan as part of professional development programs for higher education institution staff.

Contributions of each author

Author 1 - Aigul Syzdykbayeva - research concept development, writing the systematic review protocol, conducting literature search in databases, study screening, data extraction, writing the initial manuscript draft.

Email: syzdykbaeva.a@qyzpu.edu.kz

Author 2 - Ulzharkyn Abdigapbarova - scientific supervisor: general research guidance, methodological expertise, protocol validation, critical analysis and manuscript editing.

Email: abdigapbarova_um@mail.ru

Author 3 - Elmira Aitenova - conducting independent study screening, verifying data extraction accuracy, participating in resolving

disagreements during study selection, manuscript editing.

Email: emma_14@mail.ru

Author 4 - Yulduz Iminova - quality assessment of included studies, data analysis and synthesis, participation in writing results and discussion sections, bibliography formatting.

Email: iminova.yulduza@mail.ru

Author 5 - Inkar Khassanova - independent verification of the data extraction process, participation in thematic analysis, assistance in interpreting results, formatting the manuscript according to journal requirements.

Email: khassanova.inkar@mail.ru