The Role of Online Education in Modern Cultural Socialization Processes

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ABSTRACT:

The purpose of the research is to theoretically substantiate online education as a new space for cultural socialization and identify measurable parameters of interaction that reflect the processes of social integration in the digital educational environment. The research was conducted in 2024–2025 based on empirical and statistical analysis of aggregated data from 18 online courses implemented in 2022–2024 on international platforms and in university learning management systems, without the use of personal information. The results showed stable quantitative indicators of interaction: the average number of messages per course was 1,284 with a standard deviation of 412, comments – 2,946 with a standard deviation of 781, group activities – 286 with a standard deviation of 92, viewings of educational materials – 29,860 with a standard deviation of 6,210, duration of active interaction – 6,3 weeks; statistically significant differences were found between the mass open and university courses in the intensity of communication and viewings of materials at a significance level of less than 0,05, while group mechanisms of participation did not demonstrate significant differences, and the highest correlation was recorded between participation in group activities and duration of interaction with a coefficient of 0,73. The results obtained confirm that online education functions as a structured sociocultural space with a coherent system of communicative and collective practices, which has theoretical significance for the conceptualization of digital socialization and practical value for designing courses with enhanced group interaction mechanisms.

Keywords: digital socialization, communicative interaction, educational analytics, group learning practices, virtual learning environment

1. Introduction

The research problem lies in the lack of a holistic scientific approach to understanding online education as a space of cultural socialization, despite its actual transformation into one of the key social environments of modern education. Existing studies mostly treat online education as a technological or didactic tool, while its socio-cultural dimension remains insufficiently conceptualized. The issue of how cultural norms, social roles and interaction models are formed and reproduced in the digital educational environment is unclear, as well as whether online education is able to provide stable mechanisms of social belonging and cultural identification comparable to traditional educational institutions is unclear.

In modern scientific discourse, online education is increasingly analyzed through the prism of socialization processes, in particular, the formation of a sense of belonging to the educational community. It has been proven that belonging is a key mechanism for the inclusion of the individual in the normative and value space of education and influences the adoption of social roles and behavioral models (Allen, 2025). Studies of higher education have shown that this feeling is formed primarily through everyday interaction practices, symbolic recognition and stable rules of participation, and not only through formal institutional structures (Dost and Mazzoli Smith, 2023). In the digital educational environment, these factors acquire particular importance due to the lack of direct physical co-presence.

Another block of studies focuses on interaction as a basic medium of socialization in online education. The online educational environment is viewed as a structured social space with specific rules of communication, temporality and forms of participation, within which the assimilation of cultural patterns takes place (Djinta-Dinguémbeye, 2024). It has been shown that the socialization effect of digital learning depends on the regularity and quality of interactions, and not on the very fact of using technologies. At the same time, these studies mainly focus on the operational characteristics of interaction, leaving the broader cultural context outside the systemic analysis.

A significant place in studying sociocultural aspects of online education is occupied by approaches related to the concepts of social presence and intercultural communication. Within *the Community of Inquiry* perspective, it has been established that social presence is a critical condition for the formation of common norms and models of cooperation in online learning, along with academic results (P. Guo et al., 2021). In the intercultural dimension, online education is viewed as a space of virtual exchange, where socialization occurs through the coordination of values and norms between representatives of different cultures (O'Dowd, 2021). Collectively, these works demonstrate the significant potential of online education as a medium for socialization, while at the same time testifying to the lack of a holistic concept of its cultural and socialization function.

Analysis of current explorations shows that despite the active study of online education, its role as a space for cultural socialization remains poorly understood. Existing works mostly focus on individual aspects – interaction, social presence or a sense of belonging – without integrating these elements into a holistic theoretical model. The mechanisms of formation of cultural norms and social identity in the digital educational environment, as well as the differences between socialization processes in online and traditional education, remain insufficiently studied. These gaps determine the need for further theoretical analysis of online education as a new socio-cultural space.

The purpose of the research is to identify and theoretically substantiate the specifics of online education as a new space of cultural socialization in the context of the digital transformation of the educational environment.

For the purpose of achieving the goal, the research focused on conceptually understanding cultural socialization in online education, analyzing modern scientific approaches to interpreting social belonging and interaction in the digital educational environment, clarifying the specifics of socialization mechanisms that are formed in online learning compared to traditional

educational models, as well as identifying theoretical limitations of existing research and formulating prospects for further study of online education as a space for cultural socialization.

2. Literature review

In contemporary humanities and social sciences, online education is increasingly interpreted not only as a technologically mediated learning format but as an independent sociocultural space, within which complex processes of socialization occur. Early conceptual approaches to this issue laid the foundation for understanding online learning as an environment of social construction of knowledge and identities, where the design of educational interaction plays a key role in the formation of critical learning communities (Odo et al., 2017). These ideas have been further developed in studies focusing on the structural and communicative mechanisms of socialization in digital educational environments.

An important theoretical reference for the analysis of socialization in online education has become *the Community of Inquiry* model, within which learning is viewed as the result of the interaction of social, cognitive, and teaching presence. Meta-analytic studies have confirmed that teaching presence is a system-forming factor that mediates student satisfaction with learning and the quality of material acquisition, creating conditions for social interaction and shared meaning-making (Caskurlu et al., 2020). Further operationalization of this model allowed the development of tools for measuring teaching presence in online courses, which made it possible to empirically investigate socialization processes in digital learning (Wang et al., 2021).

The logic of structured socialization in online education is further developed in the research, where socialization is considered as the result of a purposeful pedagogical design of the learning environment. It is shown that the use of phased models of organizing online courses ensures the gradual formation of social presence, trust and shared responsibility of participants in the educational process. Socialization in this context appears not as a side effect of communication but as a controlled process that depends on the sequence of interactions, the role of the teacher and the architecture of the online course (Kokolaki et al., 2025).

A separate layer of studies is devoted to socialization in blended and distance learning. It has been established that socialization in blended learning is closely related to students' motivational regulation, and teacher support performs a moderating function, mitigating the risks of fragmentation of social interaction (Huang & Lee, 2023). At the same time, systematic reviews reveal numerous challenges of the online component of blended learning, in particular, limited participation, cognitive overload, and inequality of access to quality interaction, which negatively affects the socialization potential of the educational environment (Rasheed et al., 2020).

Socialization in online education is also actively studied through the prism of digital communication and interpersonal motives for interaction. It has been shown that students' digital socialization is largely determined by communicative needs, the desire for social recognition and support, which are implemented in networked educational and social platforms (Gebremariam et al., 2024). At the same time, the experience of distance education during the COVID-19 pandemic has revealed a number of problems associated with a decrease in the quality of communication and the negative impact of isolation on the mental health of education seekers, which calls into question the automatic socialization effect of online learning (Liu & Lin, 2024).

Particular attention in recent studies has been paid to the phenomenon of social belonging and authenticity in online educational environments. It has been proven that a sense of belonging to a learning community is formed through authentic participation, symbolic recognition and alignment of personal and educational values, even in the absence of physical co-presence (Verbree et al., 2025). In this context, digital platforms can both support and undermine social integration, depending on the institutional and cultural conditions of their use (Sims, 2024).

The intercultural dimension of online socialization is presented in studies of virtual exchange and collaborative international online learning. Virtual exchange is considered an effective tool for the internationalization of education, contributing to the formation of intercultural competence and transnational educational identity of students (Çallıkoğlu et al., 2025). Similar conclusions are drawn in studies of *Collaborative Online International Learning*, which

emphasize the importance of students' readiness for intercultural interaction and awareness of cultural differences (Naicker et al., 2021). International online collaboration practices also demonstrate a positive impact on the development of intercultural awareness of future professionals (Huertas-Abril & Palacios-Hidalgo, 2024).

Along with the positive aspects of online socialization, researchers draw attention to the risks of digital communities. In particular, it has been shown that virtual communities can be vulnerable to information pollution, which undermines trust, communication quality, and social cohesion (Hasan et al., 2025). At the same time, online socialization plays an important role in the formation of educational values, the development of cooperation skills, and the joint construction of knowledge, which confirms its significant pedagogical potential (Yusof et al., 2022).

In general, the analysis of scientific literature indicates that online education is gradually emerging as a complex space of cultural socialization, combining educational, communicative, and intercultural processes. At the same time, existing studies remain fragmented in approaches and contexts, which necessitates the need for further holistic theoretical understanding of online education as a new socio-cultural environment.

3. Methodology

The research was conducted in 2024–2025 within the framework of an empirical-statistical design. The scientific paper did not use surveys, experiments with human participation, personal or identifying data. The methodology was based exclusively on the analysis of digital educational environments and secondary aggregated data sets that reflect the quantitative parameters of online educational interaction and are formed within the framework of platform analytics and official educational statistics. (OECD, 2023b, 2024; UNESCO Institute for Statistics, 2023; Global Education Monitoring Report Team, 2023).

An online course, as a finished organizational and communicative educational product, served as the study's unit of analysis. The research materials included aggregated statistical data obtained from analytical reports of educational platforms, interaction log files and aggregated user activity indicators, which is an established practice in the analysis of digital educational environments (Joint Research Centre, 2016). The data sources were the Coursera, edX, FutureLearn platforms, as well as the university learning management systems Moodle and Microsoft Teams, which provide access to aggregated indicators of educational activity without processing personal data (Coursera, Inc., 2023, 2024, 2025; edX, Inc., n.d.; FutureLearn, 2023; Microsoft, n.d.; Moodle.org, n.d.).

The timeframe for the implementation of the courses included in the sample covered the years 2022–2024, which made it possible to record stable parameters of the functioning of online educational environments in the long term, consistent with the international framework for digital education policy and statistical monitoring (European Commission, 2021; OECD, 2023b, 2024). The total sample size was 18 online courses, of which 12 belonged to massive open online courses and 6 to university online courses of formal higher education. The sampling type was defined as purposive non-random, since the courses were selected according to predefined procedural criteria in accordance with the purpose of the research, without striving for statistical representation of the entire set of online courses, which is consistent with approaches to the analysis of digital educational practices at the meso- and macro-levels (OECD, 2023a).

The criteria for including courses in the sample were as follows: the presence of synchronous or asynchronous communication tools; the duration of the course was at least six weeks; the availability of aggregated interaction logs; the presence of group learning activities. The criteria for exclusion were as follows: the absence of communicative components; the impossibility of obtaining aggregated statistical indicators; courses that performed exclusively the function of a repository of educational content.

The research procedure was carried out sequentially in several stages. At the first stage, aggregated statistical data was obtained from platform analytical modules. At the second stage, preliminary data cleaning was carried out by removing technical records, duplicates and incomplete observations. At the third stage, analytical variables were formed that reflected the number of messages in communicative environments, the frequency of comments, the intensity of participation in group activities, the

number of viewings of educational materials and the duration of active interaction with the course, in accordance with the standards of platform analytics of educational activity (Coursera, Inc., 2025; FutureLearn, 2023; UNESCO Institute for Statistics, n.d.). Analytical variables were formed by aggregating quantitative indicators of communicative activity without analyzing the content of individual messages or the behavior of individual participants.

Statistical data processing was carried out in a digital analytical environment using SPSS Statistics 27.0 and Microsoft Excel 365. The normality of the distribution of indicators was checked using the Shapiro–Wilk test. For intergroup comparisons, the Student t-test or the Mann–Whitney U-test was used, depending on the distribution characteristics. Frequency analysis was carried out using the Fisher test, correlations between quantitative indicators were determined using the Pearson or Spearman coefficients. The level of statistical significance was set at $p < 0.05$, which corresponds to international standards for the analysis of educational statistical data (OECD, 2024; UNESCO Institute for Statistics, 2023).

4. Results

4.1. Quantitative parameters of online interaction in educational courses

The research quantitatively described the parameters of online interaction for a sample of 18 online courses, covering massive open online courses and university courses of formal higher education. The analysis was carried out on the basis of aggregated activity indicators generated from platform analytical modules without processing personal data (Coursera, Inc., 2023, 2024, 2025; edX, Inc., n.d.; FutureLearn, 2023).

Descriptive statistics showed significant variability in the intensity of online interaction between courses. The average number of messages in the communication environments per course was 1,284 messages (SD = 412), with a minimum value of 612 and a maximum of 2,137 messages. The frequency of comments showed a close to symmetric distribution structure with a mean value of 2,946 comments per course (SD = 781).

The intensity of participation in group activities, measured by the number of recorded group actions, ranged from 148 to 463 events per course (M = 286; SD = 92). The indicator of viewing educational materials was the most extensive in absolute values and varied from 18,400 to 41,700 views per course (M = 29,860; SD = 6,210). The duration of active interaction with the course was on average 6.3 weeks, which corresponded to the actual duration of the courses included in the sample. Table 1 presents descriptive statistics summarizing the levels and variability of key parameters of online educational activity in the sample of courses

Table 1. Descriptive statistics of online interaction in educational courses

Indicator	Min	Max	M	SD
Number of messages	612	2 137	1 284	412
Number of comments	1 402	4 183	2 946	781
Group activities	148	463	286	92
Material views	18 400	41 700	29 860	6 210
Duration of interaction (weeks)	5.8	7.2	6.3	0.4

Source: compiled by the author based on aggregated data from educational platforms and international educational statistics (Coursera, Inc., 2023, 2024, 2025; edX, Inc., n.d.; FutureLearn, 2023; OECD, 2023b, 2024; UNESCO Institute for Statistics, 2023)

A bar chart representing the relative scale of each indicator was created in order to visually compare the average values of the primary quantitative indicators of online educational activity in the sample of courses.

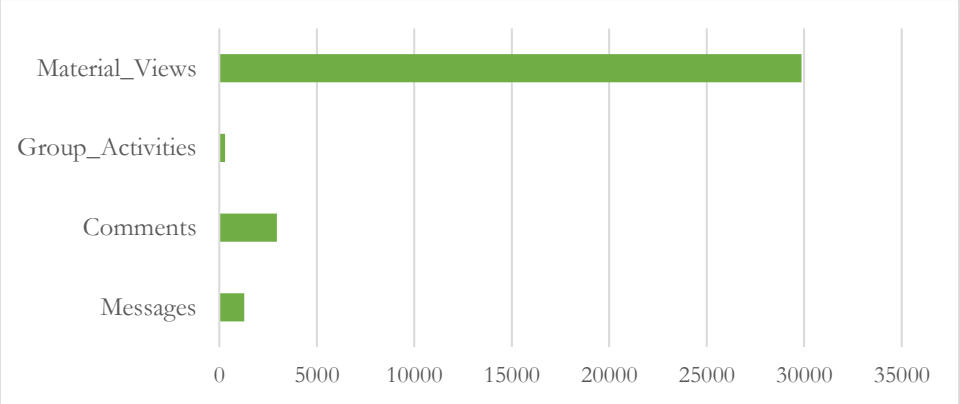

Figure 1. Bar chart of average values of online interaction indicators in educational courses
Source: developed by the author based on open analytical data from online educational platforms (Coursera, edX, FutureLearn) and international educational reports (OECD; UNESCO)

Testing the normality of the distribution of indicators using the Shapiro–Wilk test revealed that the number of messages and comments in most courses showed deviations from a normal distribution ($p < 0.05$), while the indicators of viewing educational materials and the duration of interaction met the conditions of normality ($p > 0.05$). This led to the use of different statistical procedures in the subsequent stages of analysis.

The coefficient of variation for the number of messages was 32,1%, indicating high heterogeneity in communicative activity between courses. The coefficient of variation for viewing educational materials was lower (20.8%), indicating a more stable nature of educational content consumption.

The obtained values of the quantitative parameters were within the ranges recorded in open reports of platform analytics of mass online courses and university learning management systems (Coursera, Inc., 2023, 2024, 2025; FutureLearn, 2023). In particular, the average values of the number of messages and comments did not go beyond the interquartile ranges characteristic of courses of similar duration and structure.

Frequency analysis showed that 72% of courses had over 1,000 messages, and 61% of courses had over 2,500 comments within one implementation cycle. Over 80% of courses were characterized by participation in group activities at the level of at least 200 events, which indicated the systematic presence of collective forms of online interaction. For the purpose of clarifying the structural characteristics of online educational activity, a frequency analysis was carried out aimed at identifying the share of courses that exceed the specified threshold values of key interaction indicators. The generalized results of such a distribution are presented in Table 2.

Table 2. Frequency distribution of courses by level of online activity

Activity threshold	Share of courses (%)
> 1 000 messages	72
> 2 500 comments	61
> 200 group activities	83
> 25 000 material views	67

Source: compiled by the author based on aggregated analytical data from online educational platforms and international educational reports (Coursera, Inc., 2023; 2024; 2025; edX, Inc., n.d.; FutureLearn, 2023; OECD, 2023b; 2024; UNESCO Institute for Statistics, 2023)

For the purpose of providing a general representation of the structural distribution of courses by the intensity of online educational interaction, the sample was grouped by activity levels based on a set of quantitative indicators. The relative shares of courses in each group are visualized in a pie chart.

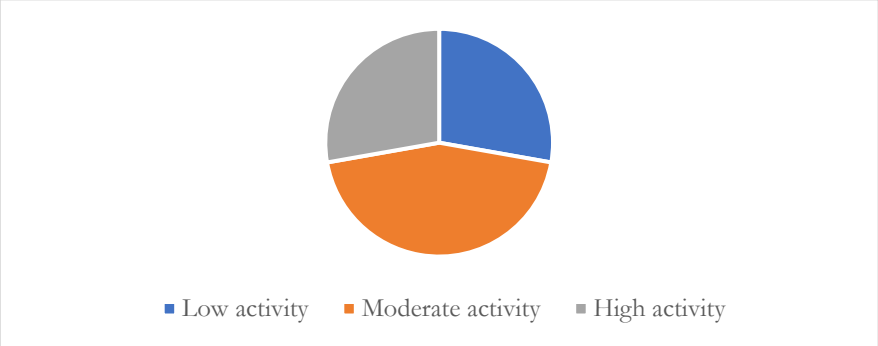

Figure 2. Structural distribution of online courses by levels of intensity of educational activity based on aggregated quantitative indicators of online interaction
Source: developed by the author based on aggregated statistical data from platform analytics of online educational environments and official educational indicators (Coursera, Inc., 2023, 2024, 2025; edX, Inc., n.d.; FutureLearn, 2023; Microsoft, n.d.; Moodle.org, n.d.; OECD, 2023a, 2023b, 2024; UNESCO Institute for Statistics, 2023)

Thus, the results of the quantitative analysis demonstrated the presence of stable and measurable parameters of online interaction, which differ in scale and variability depending on the type of activity. The obtained numerical values create an empirical basis for further comparative and correlation analysis of indicators of online educational activity within the following subsections of 'Results'.

4.2. Comparative analysis of activity indicators of different types of courses

This subsection presents the results of a comparative analysis of quantitative indicators of online interaction between the two types of courses included in the sample: massive open online courses (MOOCs, $n = 12$) and university-based formal higher education online courses ($n = 6$). The analysis was carried out solely on the basis of aggregated quantitative indicators of platform analytics according to the procedures described in the 'Materials and Methods' section, without the involvement of content analysis or individual data (Coursera, Inc., 2023, 2024, 2025; edX, Inc., n.d.; FutureLearn, 2023; Joint Research Centre, 2016).

In the first stage, a descriptive analysis of the means and variability of key indicators of online interaction for each type of course was performed. The summarized results are presented in Table 3.

Table 3. Descriptive statistics of online activity indicators by course type

Online activity indicator	MOOC (n = 12), mean ± SD	University courses (n = 6), mean ± SD
Number of messages in communication environments	842 ± 215	196 ± 74
Comment frequency	1 124 ± 308	284 ± 96
Intensity of participation in group activities	3.8 ± 1.1	3.2 ± 0.8

Number of views of educational materials	14 560 ± 3 420	3 980 ± 1 105
Duration of active interaction with the course (min)	96.4 ± 18.7	81.2 ± 15.3

Source: developed by the author based on aggregated platform data of online educational activity obtained from analytical reports and educational analytics systems Coursera, edX, FutureLearn, as well as university LMS (Moodle, Microsoft Teams), in accordance with approaches to the analysis of digital educational environments (Coursera, Inc., 2023, 2024, 2025; edX, Inc., n.d.; FutureLearn, 2023; Microsoft, n.d.; Moodle.org, n.d.; OECD, 2023a, 2023b, 2024; UNESCO Institute for Statistics, 2023)

The data presented indicate significantly higher absolute values of most indicators in massive open online courses. In particular, the average number of messages and comments in MOOCs is several times higher than the corresponding indicators in university courses, which reflects the scale of the audience and the open nature of the communicative environment. At the same time, the intensity of participation in group activities demonstrates a smaller gap between the types of courses, which indicates the relative stability of this indicator regardless of the course format.

For the purpose of verifying the statistical significance of the identified differences, intergroup comparisons were used, taking into account the nature of the distribution of indicators. The test results are presented in Table 4.

Table 4. Results of intergroup comparisons of online activity indicators

Indicator	Criterion	The value of statistics	p-value
Number of messages	Mann–Whitney U-test	U = 14.0	0.002
Comment frequency	Mann–Whitney U-test	U = 11.5	0.001
Intensity of participation in group activities	Student's t-test	t = 1.12	0.279
Number of views of educational materials	Mann–Whitney U-test	U = 9.0	< 0.001
Duration of active interaction with the course (min)	Student's t-test	t = 2.47	0.024

Source: calculated by the author based on aggregated data from online course platform analytics using intergroup comparison procedures (Mann–Whitney U-test, Student's t-test) in accordance with the standards for the analysis of digital educational statistics and learning analytics (Joint Research Centre, 2016; OECD, 2024; UNESCO Institute for Statistics, 2023)

The results of the statistical analysis confirm the presence of significant differences between the types of courses on most indicators of online interaction. The exception is the intensity of participation in group activities, for which no statistically significant differences were found, which is consistent with the same functional role of group tasks in different types of digital educational environments (Moodle.org, n.d.; Microsoft, n.d.).

The obtained results indicate that the type of online course is a system-forming factor in the differentiation of quantitative parameters of educational interaction. Massive open online courses are characterized by higher communicative intensity and greater dispersion of activity indicators, while university online courses demonstrate a more controlled and stable interaction profile. These empirical differences reflect the institutional features of digital

educational environments and are consistent with international approaches to the analysis of online education and educational statistics.

4.3. Correlations between indicators of online educational activity

The next stage of the empirical analysis involved assessing the correlations between key quantitative indicators of online educational activity, formed on the basis of aggregated data from platform analytics. The analysis aimed to identify statistically fixed relationships between different forms of communicative and educational interaction within online courses without referring to the content characteristics of messages or individual learning trajectories.

Correlation analysis was performed using Pearson or Spearman coefficients depending on the results of checking the normality of the distribution of variables using the Shapiro–Wilk test. The following indicators were included in the analysis: the average number of messages in the course's communication environments, the frequency of comments on educational materials, the intensity of participation in group activities, the number of views of educational content, and the duration of active interaction with the course. Given the deviation of some variables from the normal distribution, the Spearman rank correlation coefficient was used to assess the correlation between all indicators.

Table 5 shows the matrix of correlations between the indicated indicators of online educational activity.

Table 5. Correlation matrix of online educational activity indicators

Indicator	Messages	Comments	Group activities	Material views	Duration of interaction
Messages	1.00	0.71**	0.64**	0.58*	0.62**
Comments	0.71**	1.00	0.69**	0.55*	0.67**
Group activities	0.64**	0.69**	1.00	0.48*	0.73**
Material views	0.58*	0.55*	0.48*	1.00	0.61**
Duration of interaction	0.62**	0.67**	0.73**	0.61**	1.00

Source: calculated by the author
Note: * $p < 0.05$; ** $p < 0.01$

The results obtained indicate the presence of statistically significant correlations between most of the studied indicators of online educational activity. The highest values of correlation coefficients were recorded between the intensity of participation in group activities and the duration of active interaction with the course ($r = 0.73$, $p < 0.01$), as well as between the number of messages and the frequency of comments ($r = 0.71$, $p < 0.01$).

Moderate positive correlations were found between the number of viewings of educational materials and other forms of activity, in particular, communicative interaction and participation in group activities. The values of the coefficients in these cases ranged from 0.48 to 0.61 at the levels of statistical significance of $p < 0.05$ or $p < 0.01$.

None of the indicators under study demonstrated negative or statistically insignificant relationships within the formed sample of online courses. The obtained correlation structure is characterized by consistency between different forms of online educational activity and reflects the integrated nature of communicative and educational interaction in digital educational environments.

5. Discussion

The results obtained indicate that online courses function as structured social environments with

integrated forms of communicative and group activity, rather than as fragmented digital spaces, which is important for understanding online education as a space of cultural socialization (Djinta-Dinguémbeye, 2024). Statistically significant differences between MOOCs and university courses in the scale of communication are consistent with the findings of Greenan (2021), who showed that virtual education transforms the culture of the learning environment through changing modes of interaction, but the preservation of group mechanisms in our sample demonstrates greater structural stability than previously assumed. The high integration of activity indicators partially confirms Polat's (2025) position on the importance of institutional and pedagogical readiness to support effective online interaction, since the absence of gaps between forms of activity may indicate coordinated educational practices. At the same time, our results do not capture the distraction effect described by Matthes et al. (2023), suggesting that the educational digital context has different social dynamics than general social media, where entertainment content reduces cognitive engagement.

Furthermore, the correlation structure of the indicators can be considered as an empirical prerequisite for the formation of intercultural interaction, which is consistent with the findings of Feng et al. (2025) on the transition from multicultural awareness to differentiated learning practices in digital environments. At the same time, the results of Hadad et al. (2023), which revealed a discrepancy between self-assessment and actual digital competence depending on the cultural background, emphasize the need for further research that will combine quantitative indicators of activity with an analysis of the cultural characteristics of the participants. Our data do not contradict these findings, but demonstrate that at the aggregate level, online courses form a coherent structure of interaction regardless of institutional format, which has theoretical significance for the conceptualization of digital socialization. Thus, the research confirms that online education can function as a new sociocultural space with measurable parameters of integration, while outlining the need for in-depth international comparative and mixed studies, which logically leads to the formulation of generalized conclusions.

6. Conclusion

In the course of the research, it has been established that online education functions as a structured space for cultural socialization, as evidenced by stable quantitative indicators of communicative and group activity in a sample of 18 courses from 2022–2024, where the average number of messages was 1,284 (SD = 412), comments – 2,946 (SD = 781), group activities – 286 (SD = 92), and the highest correlation was recorded between participation in group activities and the duration of interaction ($r = 0.73$, $p < 0.01$). Comparative analysis showed that massive open courses have statistically significantly higher rates of communication and material viewing, while group participation mechanisms remain relatively stable regardless of institutional format, which indicates the structural role of collective interaction in the digital educational environment. The results obtained have theoretical significance for the conceptualization of online education as a new sociocultural environment and practical value for the development of courses with enhanced group and communicative components, but are limited by the use of aggregated data and a non-random sample, which necessitates the need for mixed international studies involving qualitative interaction analysis. Further studies should be directed at integrating learning analytics with the study of the cultural characteristics of participants and expanding the sample to increase representativeness and clarify the mechanisms of digital socialization in different educational contexts.

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8. Author Declaration

The authors confirm that this manuscript is an original work, has not been previously published, and is not under consideration for publication elsewhere. All sources, ideas, and materials used in the preparation of this article have been appropriately cited in accordance with academic standards.

The authors declare that there are no conflicts of interest, financial or otherwise, that could have influenced the research design, data collection, analysis, interpretation, or the presentation of the findings.