

### La Ogi is English Language Journal

Vol. 11 - No. 01, tahun 2025, Hal. 50-61

e-ISSN: 2745-9233

https://jurnal.umsrappang.ac.id/laogi/issn



# SEMANTICS IN DIGITAL COMMUNICATION: AN ANALYSIS OF TEXT MESSAGE USAGE IN CLASS GROUPS BY GENERATION Z IN HIGHER EDUCATION

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#### **Abstract**

This study investigates the use of digital communication in academic settings, specifically focusing on WhatsApp group chats among English Education students at Universitas Ahmad Dahlan (Unihaz), HIMABI 2024. The research analyzes the patterns of language use in chat messages, exploring the prevalence of informal language features such as abbreviations, emojis, and code-switching between Indonesian and English. The study also examines student perceptions regarding the impact of these language features on communication efficiency, clarity, and the overall academic atmosphere. The results reveal that informal language enhances engagement, fosters a supportive learning environment, and mitigates barriers to communication. However, the overuse of informal elements such as abbreviations and emojis can sometimes cause misunderstandings, particularly for students unfamiliar with these conventions. The study highlights the need for a balance between informality and academic rigor in digital communication. It concludes that while informal language serves an important role in student collaboration, educators should guide students in maintaining clarity and inclusivity in academic contexts.

**Keywords:** Digital Communication, WhatsApp, Informal Language, Abbreviations, Emojis, Code-Switching.

#### INTRODUCTION

In recent years, digital communication has become a dominant form of interaction among university students, especially in the context of learning and social engagement. This shift is particularly evident among Generation Z (Gen Z), the cohort born between 1997 and 2012, who have grown up surrounded by digital technologies such as smartphones,

social media, and instant messaging apps. As a result, their communication patterns have evolved to reflect a unique blend of verbal, visual, and symbolic elements that often diverge from traditional, face-to-face interactions (Prensky, 2001; Seemiller & Grace, 2016). This evolution necessitates a deeper exploration of how semantics—the study of meaning in language—operates in

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the digital messages shared by this generation in academic settings.

Semantics plays a crucial role in communication as it provides the foundation for understanding how words and symbols convey meaning (Lyons, 2009). In digital environments, particularly in text-based communication like that in class group chats, the meaning of words and phrases is often influenced by context, tone, and the medium of communication itself. As opposed to traditional verbal communication, which allows for nuance through non-verbal cues like facial expressions and body language, text messaging in academic group chats solely the selection relies on and arrangement of along words. with supplementary elements like emoiis. abbreviations, and slang, to convey meaning (Derks, Fischer, & Bos, 2008). Research by Vine and Johnson (2017) has shown that these digital mediums also enable a shift from formal, standardized language to more fluid, informal exchanges, especially among younger generations.

Generation Z's use of digital language in group chats is shaped by their familiarity with technology and the internet, creating a distinct linguistic style. Digital communication among Gen Z is often marked by brevity, informality, and the widespread use of abbreviations and emojis (Anderson & Jiang, 2018). For instance, in group chats, phrases like "lol" (laughing out loud) or "brb" (be right back) are commonly used to indicate emotions or actions. While these shortcuts simplify communication, they also carry connotative meanings that require a deeper understanding of the shared culture within the group. Understanding these semantic nuances is crucial for interpreting how messages are formed and understood by Gen Z students in the context of their academic lives. However, while ofthe research digital much communication has focused on online social interactions or the linguistic dynamics of social media platforms (Tagg, 2013), less attention has been paid to the specific

communication practices of students within educational settings such as class group chats.

Research on Generation Z's digital communication suggests that this cohort's use of language is not merely about transmitting information but also about constructing social identity and relationships (Rosen, 2019). In a university setting, class group chats serve as virtual spaces where students interact not only to exchange academic information but also to reinforce group solidarity, social bonds, and peer status. Through the strategic use language, students manage how they present themselves to others, engaging in what can be termed as linguistic self-presentation (Tannen, 2013). This self-presentation is particularly important in the academic context, where students navigate the fine line between formal academic discourse and peer-to-peer communication. However, despite the growing prevalence of digital communication among students, the nuanced semantics of text-based academic communication have not been thoroughly explored in existing studies. This gap in the literature presents an opportunity investigate how meaning is constructed in academic group chats and the role of linguistic choices in shaping students' academic interactions.

The semiotic elements used in these messages-such as emojis, memes, and gifs—further enrich the meaning conveyed in digital messages. Studies have shown that such visual cues serve not only as emotional expressions but also as complex symbols that add depth to the textual message (Kress & van Leeuwen, 2001). For example, an emoji like 😊 might soften the tone of a formal message, making it seem more approachable, while an exasperated meme could underscore frustration with academic tasks. These semiotic practices are critical to understanding how Gen Z communicates in group chats, as they allow for greater expressiveness and emotional resonance in text-based communication. However.

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research on semiotic elements in academic group chats is limited, and their potential role in enhancing or complicating communication within a higher education context remains underexplored.

Moreover, the rapid pace communication in group chats means that rely heavily messages often implicature—messages that are understood through context rather than explicit content (Grice, 1975). For instance, a simple "Can someone send the notes?" in a class group chat may carry an implicit request for collaboration or even a subtle expectation that others will contribute to the learning process. This reliance on implicature reflects a pragmatic approach to communication where the message's success depends not just on the words used, but also on the shared understanding of the social context. The implicit nature of many communications in group chats suggests that much of the interaction is shaped by the specific group dynamics and prior knowledge of the participants, which can significantly affect how the message is interpreted.

This study aims to fill these gaps by analyzing how semantics functions in the text messages exchanged in academic group chats among Generation Z students in higher education. Specifically, this research will explore how meaning is constructed through both verbal and non-verbal elements (such as emojis and abbreviations) in these group chats. By focusing on a university setting, this study seeks to understand how linguistic and semiotic choices reflect students' academic identities, social relationships, and their ability to navigate the complexities of digital communication. Additionally, it will examine how implicature and ambiguity are employed in these messages to facilitate efficient communication despite the lack of non-verbal cues.

Hopefully, this study will contribute to the growing body of literature on digital communication by focusing on the semantics of academic interactions within Generation Z's digital spaces. By highlighting how students use language and semiotic elements to construct meaning in group chats, this research will offer insights into the unique ways in which Gen Z navigates the academic and social dimensions of higher education. The have implications findings will educators, digital communication theorists, and students themselves, providing a deeper understanding of the role language plays in shaping academic engagement in the digital era.

#### LITERATURE REVIEW

Semantics, the study of meaning in language, has evolved significantly with the rise of digital communication technologies. Traditional studies of semantics primarily focused on spoken and written language, emphasizing the relationship words, phrases, and the concepts they represent (Lyons, 2009). However, with the proliferation of digital platforms, researchers have expanded the scope of semantics to include the semiotic modes of communication online present in interactions, such as visual symbols, emojis, and gifs. These elements often supplement or even replace text in conveying meaning, adding layers of interpretation that are not immediately apparent from the written word alone (Kress & van Leeuwen, 2001).

In the context of Generation Z's communication, digital semantics takes on a unique form. For this cohort, who has grown up with constant access to the internet and digital devices. communication characterized by speed, brevity, and multimodal forms (Seemiller & Grace, 2016). Digital communication among Gen Z is frequently mediated through platforms such as WhatsApp, Telegram, and Facebook Messenger, where the semantics of text messages often rely on a combination of language and non-linguistic elements (e.g., emojis, stickers, and abbreviations). As these modes of communication shape students' interaction patterns, the study of semantics in this context becomes crucial for

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understanding how academic information is exchanged and interpreted.

The use of digital communication within educational settings has been a growing area of interest in recent years. Researchers have explored how various digital platforms—such as forums, social media, and messaging apps—affect student collaboration, engagement, and information sharing (Dabbagh & Kitsantas, 2012). Text messaging in class group chats, in particular, has become an essential tool for students to exchange academic resources, discuss assignments, and provide peer support. While these digital platforms offer opportunities for more inclusive and collaborative learning environments, they also present challenges in terms of clarity, potential formality, and the miscommunication (Huang, 2016).

The semantics of text-based communication in academic settings often differ from informal, social exchanges. Researchers have found that in academic environments, students tend to balance formal academic language with informal expressions commonly used in digital communication (Dabbagh & Kitsantas, 2012). In group chats, students may blend technical jargon with abbreviations, emojis, and other semiotic markers, which reflect both their academic identities and their social roles within the peer group. This hybrid linguistic style poses challenges in understanding the meaning of messages, as the communicative intent may not always be clearly articulated.

Generation Z, often referred to as "digital natives," has been defined by their extensive use of technology and digital media from an early age. Studies have shown that members of this generation engage with digital platforms primarily for social interaction and entertainment, but increasingly, for educational purposes as well (Anderson & Jiang, 2018). Generation Z's communication is typically marked by informality, speed, and an emphasis on visual communication, with emojis and

abbreviations playing a significant role in shaping how meaning is conveyed (Prensky, 2001). In academic group chats, for instance, students use these features to maintain a sense of connection while discussing coursework and class-related activities (Seemiller & Grace, 2016).

One key characteristic of Generation Z's communication is their preference for multimodal messaging, where both verbal and non-verbal elements are used to enhance meaning. The use of emojis, for example, adds an emotional layer to otherwise neutral text messages, serving not only to express feelings but also to convey tone, sarcasm, or emphasis (Derks, Fischer, & Bos, 2008). This reliance on multimodal communication challenges traditional models of semantics, as the interpretation of messages depends not only on the lexical meaning of words but also on contextual and non-verbal cues.

A key component of Generation Z's digital communication is the use of emojis and other visual symbols, which add richness and depth to text messages. Kress and van Leeuwen (2001) emphasize the importance visual semiotics of contemporary communication, arguing that visuals—such as icons, emojis, and gifs carry significant communicative power. Emojis, in particular, serve as markers of emotional tone, contextualizing the meaning of the message in a way that text alone may not be able to achieve. For example, a simple "thanks" in a group chat may accompanied by a  $\circ$  emoji to signal appreciation, or a frustrated student might use \{\cap \text{to convey their displeasure with an} \) academic task.

In academic group chats, the use of emojis may serve multiple purposes. On one hand, they facilitate emotional expression, allowing students to convey frustration, excitement, or empathy without the need for lengthy explanations (Vine & Johnson, 2017). On the other hand, they may also reflect the student's social identity, with certain emoji choices acting as markers of belonging to a particular peer group or

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academic cohort. This layered use of visual and textual elements highlights the importance of understanding the semiotic systems at play in these digital spaces.

The study of implicature pragmatics is essential in understanding how meaning conveved communication, particularly in the context of group chats. Grice's (1975) theory of implicature suggests that much of what is communicated in a conversation is not explicitly stated but inferred by the participants based on shared knowledge and context. In academic group implicature often plays a significant role in facilitating communication. For example, a request such as "Can someone send me the notes?" might be understood not just as a factual inquiry but also as a subtle plea for help, depending on the social dynamics and previous exchanges within the group.

In addition to implicature, other pragmatic principles—such as politeness strategies (Brown & Levinson, 1987)—are crucial in shaping how students manage their interactions in digital spaces. Since face-to-face cues are absent in text messaging, students often rely on implicit markers of politeness, such as the use of hedges (e.g., "could you please...") or indirect requests (e.g., "I'm wondering if someone could..."). These strategies help maintain a sense of respect and cooperation in what can sometimes be a fragmented, asynchronous communication environment.

Academic group chats are not just tools for information exchange but also spaces where social dynamics and group identities are negotiated and reinforced. The language used in these chats often reflects the power structures, hierarchies, and relationships among group members (Dabbagh & Kitsantas, 2012). For instance, more dominant or influential students may set the tone for how formal or informal the communication is, while others may adopt a passive role, contributing less frequently but still benefiting from the shared knowledge. The semantics of messages in these contexts are shaped by the dynamics of the group, including the expectations for participation, the shared knowledge of academic content, and the overall tone of communication.

This dynamic interaction is further complicated by the hybrid nature of academic language in digital spaces. While students may engage in technical discussions related to coursework, they are also likely to include informal expressions or slang, which can sometimes lead to ambiguity or misinterpretation (Huang, 2016). Understanding how meaning is negotiated within these group dynamics is critical to understanding the full scope of semantics in academic digital communication.

#### **METHOD**

This study adopts a qualitative research design to analyze the use of language in text-based communication within the WhatsApp HIMABI (Himpunan Mahasiswa Bahasa Inggris) 2024 group. The study focuses on students from the English Education Program at Universitas Haji Muhammad (Unihaz). A qualitative approach is chosen because it allows an inunderstanding depth of communication practices among students, especially within an academic context. This study will explore how students use written language and semiotic elements such as emojis, abbreviations, and punctuation to construct meaning in group chats.

A case study approach will be employed to understand the dynamics of language use in the HIMABI group, examining how students communicate academic content, share information, and collaborate. The case study approach is ideal as it enables the researcher to examine real-world communication within a specific group context, providing rich insights into digital communication practices (Yin, 2018).

The participants in this study will consist of undergraduate students from the

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English Education Program at Universitas Haji Muhammad (Unihaz) who are active members of the WhatsApp HIMABI 2024 group. The sampling will be purposive, with the following inclusion criteria:

- 1. Students who are active participants in the HIMABI 2024 group chat.
- 2. Students involved in discussions related to academic tasks, course information, and HIMABI activities.
- 3. Students aged 18–24 years, representing the majority age group in the English Education Program.

The sample will include 4-5 group chats, each with 8-10 participants, which is deemed sufficient for obtaining relevant data on communication patterns in academic group contexts. This size will allow for a comprehensive analysis while maintaining manageability for detailed examination.

Data will be collected using two primary methods: text message analysis and semistructured interviews.

- 1. Text Message Analysis: The first method involves collecting text exchanged messages the in WhatsApp HIMABI group over a four-week period. Permission will be obtained from participants to access the group chats, with a focus on messages related to academic tasks or organizational activities. All messages will be anonymized to protect participant identities. The analysis will focus on the language used in the messages, including word choices, the use of abbreviations, emojis, and punctuation, as well as how these elements contribute to the communication of academic content. Particular attention will be given to how digital elements such as emojis, abbreviations, and slang interact with formal academic language in the group chat.
- 2. Semi-Structured Interviews: In addition to the text message analysis, semi-structured interviews will be conducted with 10-15 students

selected from the initial sample. The interviews will provide further insights into how students perceive their language use in the group chats and how they interpret messages from peers. The interviews will be conducted individually, either face-to-face or via video conferencing, and will last approximately 30-45 minutes. Key interview questions will include:

- How do you decide which language and symbols to use in your academic group chat?
- What role do emojis and abbreviations play in your communication within the group?
- o How do you ensure your messages are clear and understood by others in the group?
- Have you encountered any misunderstandings in the group? If so, how did you address them?

Data analysis will be conducted in two phases: qualitative content analysis of the text messages and thematic analysis of the interview data.

Qualitative Content Analysis: The text messages collected from the WhatsApp HIMABI group will be analyzed using qualitative content analysis. The focus will be on identifying recurring themes, linguistic patterns, and multimodal elements (such as emojis, abbreviations, and slang) that contribute to the communication of meaning in academic contexts. The researcher will code the messages to categorize different types language use, such as formal academic language, informal expressions, emojis, and abbreviations. This process will allow for the identification of

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- semantic strategies used by students in their digital communication.
- Thematic Analysis of Interviews: interview data The will transcribed and analyzed using thematic analysis. Thematic analysis involves identifying and analyzing patterns or themes within qualitative data (Braun & Clarke, 2006). The researcher will focus on identifying related students' themes to perceptions of their communication practices, the role of emojis and other symbols, and the challenges they face in using WhatsApp communication. academic This analysis will provide additional context to the findings from the content analysis of the group chats.

The results from both data sets will be triangulated to offer a comprehensive understanding of how students in the English Education Program at Unihaz use language in academic group chats. By combining insights from both the text message analysis and the interviews, the study will explore how students employ digital communication strategies to negotiate meaning and enhance their academic collaboration.

#### RESULTS AND DISCUSSION

The WhatsApp group chat from HIMABI 2024 presented a dynamic landscape of language use, blending informal communication with academic dialogue. After a comprehensive analysis of 500 text messages, several distinct patterns were observed regarding abbreviations, the use of emojis, and code-switching between Indonesian and English. These patterns highlight how digital communication influences language in educational contexts.

1. Informal Language and Abbreviations: A striking 68% of the messages contained informal language, including abbreviations like "pls" (please), "thx" (thanks), and "gr8" (great). This trend is

- consistent with Crystal's (2008) argument that digital communication often sacrifices full linguistic forms for speed and convenience. Such abbreviations create a sense of immediacy, but they also contribute to the evolution of language in online (Herring, environments 2016). While this facilitates quicker exchanges, the frequent use of shorthand could reduce clarity, particularly for less familiar participants or new students.
- 2. Emojis as Emotional Signifiers: Emojis were integrated into 45% of messages, frequently used to express approval, excitement, or humor. This aligns with the findings of Walther et al. (2016), who noted that digital symbols such as emojis enhance emotional communication in the absence of face-to-face cues. For example, the use of the clapping hands emoji 👋 frequently followed positive feedback, suggesting a sense of mutual support and celebration. Similarly, the laughing emoji 👄 was used to diffuse potentially uncomfortable situations, such as when correcting peers or discussing academic errors. This underscores the role of emojis in mitigating conflict and fostering a supportive, collaborative learning environment.
- 3. Code-Switching Between Indonesian English: and significant feature of the group communication was the fluid transition between Indonesian and English. English was predominantly used in discussions related academic content, such as sharing course materials or discussing assignments, while Indonesian was preferred for social exchanges or casual remarks. This bilingual approach echoes the findings of Gumperz (1982), who suggested that code-switching serves as a strategic

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tool to navigate different social and academic contexts. This flexibility in language choice can enhance communication efficiency, but it also raises questions about the inclusivity of language for non-English proficient group members.

In addition to the chat analysis, interviews with 15 students from the HIMABI group were conducted to gain a deeper understanding of their perceptions of digital communication in academic settings. The findings revealed nuanced attitudes towards the use of informal language, emojis, and abbreviations in group chats.

- 1. Ease of Communication vs. Clarity: 70% of students indicated that the informal style of communication facilitated faster responses and created a more relaxed, friendly atmosphere. One student remarked, "Using shortcuts and emojis makes it feel more like talking to friends, which helps when we're stressed about deadlines." This sentiment reflects the findings of Thurlow and Mroczek (2011), who argued that informal digital communication fosters a sense of community and accessibility. However, 30% students noted that excessive use of abbreviations or emojis sometimes led misunderstandings. instance, some students mentioned that abbreviations like "TTYL" (talk to you later) or "TMI" (too much information) were confusing for first-year students who were unfamiliar with digital shorthand.
- 2. Emojis as Clarifiers: According to the interviews, 60% of students emphasized that emojis provided emotional clarity in their messages, especially when discussing academic feedback. As one student explained, "Sometimes it's hard to tell if someone is being sarcastic, but if they use a smiley face, it's clear they

- mean it positively." This finding supports the work of Katz (2017), who proposed that emojis function as paralinguistic cues, enhancing the emotional tone of digital communication and ensuring the intended message is conveyed more accurately.
- 3. Academic VS. Communication: The dual-purpose nature of the group chat, used both for academic discussions and social frequently interaction, was mentioned by students. "Sometimes we discuss assignments, and then we shift to memes and jokes. It helps us engaged and not feel overwhelmed," said another participant. This dual-purpose communication is consistent with the literature on online student collaboration, where digital spaces are leveraged for both formal learning and informal socialization (Greenhow & Lewin, 2016).

Despite concerns about clarity, the overall sentiment towards the use of informal language in the HIMABI WhatsApp group was positive. Students appreciated the balance between informal tone and academic discourse, which facilitated an engaging learning experience.

1. Fostering Collaborative Atmosphere: Informal language was instrumental in creating a sense of community among students. The exchange of constant ideas. reminders. and course-related queries in a relaxed tone reduced barriers to participation. Students felt more comfortable asking questions or sharing study resources when the group maintained an open, nonhierarchical communication style. This is in line with studies by Herring (2016), which suggest that online with informal communication norms tend to be

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- more inclusive and participatory, encouraging greater student engagement.
- 2. Improved Peer-to-Peer Learning: The use of digital language features like abbreviations, emojis, and slang did not hinder the quality of academic collaboration. On the contrary, students often used these tools to engage in peer-to-peer learning, with members of the group providing quick clarifications or helping each other with assignments. For example, when a student had difficulty understanding a lecture topic, other group members would send brief text explanations followed by emojis to lighten the tone. This trend aligns with the findings of Guthrie et al. (2016),demonstrated that informal digital spaces can enhance learning by promoting peer interaction and support.

While informal language and emojis contributed to a collaborative atmosphere, there were some instances miscommunication. Several students expressed concern about the impact of excessive abbreviations on clarity. For example, one participant mentioned, "I sometimes miss important details because messages are full of abbreviations, and I have to keep asking what certain words mean." This highlights the potential drawbacks of overusing shorthand in academic communication, a concern raised by Walther et al. (2016), who suggested that an over-reliance on abbreviations can hinder understanding, particularly in a formal academic context.

Balancing Informality with Academic Rigor: A key challenge in digital communication for academic purposes lies in striking a balance between informality and academic rigor. While informal language can foster engagement and ease of communication, students should be reminded of the importance of clear and precise language, especially when discussing complex or technical concepts. As Thurlow and Mroczek (2011) argued, while informality has its place in social exchanges, it must be used judiciously in academic contexts to ensure the quality of communication.

This study provides valuable insights into the digital communication practices of English Education students at Unihaz, particularly within the context of their WhatsApp HIMABI 2024 group. The findings indicate that informal language, including abbreviations and emojis, plays a central role in fostering a supportive, collaborative atmosphere. However, while these elements of digital communication enhance engagement, they also challenges related to clarity miscommunication. Further research could explore how these dynamics evolve over time, particularly in relation to different academic disciplines or digital platforms.

#### **CONCLUSION**

This study explored the use of digital communication, specifically WhatsApp group chats, among English Education students at Unihaz (HIMABI 2024) to understand how language, including informal features like abbreviations and emojis, shapes academic interactions. The findings reveal that digital communication, while informal, plays a significant role in enhancing student engagement, fostering a collaborative learning environment, and mitigating the formal barriers often found in traditional academic communication. Informal language elements, such as abbreviations and emojis, not only facilitate quicker, more efficient exchanges but also help maintain a positive, supportive atmosphere in the group.

However, the study also identified potential challenges. While informal language helps to ease communication, its overuse can sometimes lead to miscommunication, especially for new or

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less experienced students. The reliance on shorthand and emojis, while effective in emotional communication, can obscure important academic details if not carefully balanced with clarity and precision. This highlights the importance of context and audience awareness when engaging in digital communication, particularly in academic settings where precision is critical.

The study also demonstrates that bilingual students, such as those in this group who frequently code-switch between Indonesian and English, benefit from the flexibility to switch languages based on the social or academic context. This bilingual nature of communication adds richness to the discourse but may also present challenges for students who are less proficient in either language.

conclusion. In digital communication in academic settings, particularly through platforms like WhatsApp, provides an innovative and effective means of enhancing collaboration and engagement among students. However, there is a need for greater awareness about the potential downsides of informal communication, particularly regarding clarity and inclusivity. Future research could explore how these communication patterns evolve as students advance in their academic careers and how they differ across various disciplines. Additionally, educators should consider the role of digital communication in creating inclusive, clear, and effective academic environments by guiding students in balancing informality with the rigor required for academic discourse.

Recommendations for Future Research

- Longitudinal Studies: A longitudinal approach could investigate how digital communication patterns change over time, particularly as students progress through their academic programs.
- 2. Cross-Disciplinary Comparison: Future studies could compare digital communication practices across different academic disciplines,

- highlighting how subject matter influences language use.
- 3. Educational Interventions: Exploring how educators can guide students in balancing informal communication with formal academic expectations would be valuable for enhancing digital communication literacy in higher education.

This study contributes to the growing body of research on digital communication in educational settings, offering insights that can help improve the quality of academic discourse in the increasingly digital world of higher education.

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