

Advancing English Language Multiliteracies Through Cybergogy in the Age of Society 5.0

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Abstract: This study investigates the use of cybergogy into English language education to enhance multiliteracy skills among eighth-grade students in the context of Society 5.0. This research, grounded in the multiliteracies framework and emerging literacy studies, examines how digitally mediated, learner-centered spaces facilitate multimodal meaning-making and connect students' out-of-school digital activities with conventional classroom literacies. A qualitative case study methodology was employed to gather data from one English teacher and eight students via classroom observations, semi-structured interviews, and the examination of student multimodal outputs. The findings indicate that cybergogy promotes significant learner autonomy, as students participate in exploratory interactions while utilizing platforms like Canva and mobile video editors. Students exhibited a diverse array of multiliteracies, encompassing linguistic, visual, digital, critical, and collaborative literacies, while creating captions, audio narrations, posters, and short movies. Successful execution of cybergogy necessitated explicit instructional modeling, user-friendly and mobile-compatible tools, and adaptable multimodal task frameworks that enabled learners to engage based on their strengths. Furthermore, cybergogy effectively connected students' digital skills acquired outside of school with the predominantly text-focused methodologies commonly employed in English classrooms, leading to increased engagement, less anxiety, and enhanced relevance. The findings indicate that cybergogy is an effective teaching strategy for cultivating English multiliteracies in digitally saturated society. The research emphasizes the necessity for pedagogical innovation, accessible technology infrastructure, and curriculum designs that genuinely incorporate multimodal and digital literacy practices.

Keywords: Cybergogy, English, Multiliteracies, Multimodal Learning.

Introduction

The transition to Society 5.0 has transformed English language instruction. This emerging society integrates digital and physical realms, facilitated by technologies including artificial intelligence and big data (Bernovskis et al., 2024; Shahidi Hamedani et al., 2024). In this context, learners must acquire knowledge beyond mere grammar and vocabulary. They should also utilize tools such as images, gestures, sound, and layout in their communication. The multiliteracies approach, articulated by (Cazden et al., 1996), posits that communication extends beyond verbal language to include visual, kinetic, auditory, and spatial components. Learners should generate and comprehend messages through various methods,

rather than solely relying on reading or listening. In English learning, this promotes engagement with mixed-format texts, fosters critical thinking regarding global concepts, and facilitates the comprehension of information from diverse cultures in digital environments. Recent research highlights the literacies essential for navigating digital life, including the ability to manage tasks concurrently, integrate various writing styles, engage with diverse media formats, solve problems, and collaborate to construct meaning (Muawanah et al., 2024; Vodă et al., 2022; Zakir et al., 2025). These skills are expected of English learners in contemporary contexts.

Alongside the development of literacy practices, cybergogy has arisen as a pedagogical method that combines cyber-based environments with

cognitive, emotional, and social aspects of learning. Cybergogy fosters learner autonomy, collaboration, and engagement through the use of digital tools and platforms, enabling students to actively construct knowledge, express their identities, and engage in interactive learning environments (Rohman et al., 2023; Satria et al., 2022; Wang & Kang, 2006). In English language learning, cybergogy corresponds with heutagogical principles by allowing students to guide their learning via digital storytelling, virtual communication, collaborative writing, and immersive simulations (Bizami et al., 2023; Rahma et al., 2021). This method fosters multiliteracy competencies by utilizing digital modalities that reflect the genuine literacy practices employed by learners in their everyday activities.

A substantial body of research documents how digital environments are reshaping the development of literacy. Scholars such as (Haleem et al., 2022; Lv, 2022; Pereira et al., 2019) argue that adolescents frequently learn more effectively through digital media, popular culture, and social networks than via traditional classroom methods. However, they also note that students often find school-based technology use disengaging when educators fail to integrate students' real-world digital literacies into instruction. Additionally, studies of virtual worlds such as Second Life reveal their unique value in fostering multimodal literacy, collaboration, and digital writing (Anstadt et al., 2013; Damaševičius & Sidekerskienė, 2024; Guzzetti & Stokrocki, 2013; Ika Sari et al., 2024). These platforms help learners synthesize information, design digital spaces, and communicate interactively skills essential for 21st-century literacy. Nevertheless, recent multiliteracies research (Rahma et al., 2021; Satria et al., 2022) tends to emphasize general literacy development while leaving a gap in evaluating how cybergogy specifically shapes English multiliteracies.

Although digital literacy practices are increasingly acknowledged, significant research gaps persist. There is currently a limited understanding of the systematic integration of cybergogy into English language learning for the development of multiliteracy competencies that

meet the requirements of Society 5.0. The application of cybergogy in ICT and general education contexts has been examined; however, its direct relevance to English multiliteracies remains insufficiently developed. Furthermore, while virtual worlds and immersive platforms have demonstrated potential in fostering digital literacy development, there is a notable lack of research linking these environments to structured multiliteracy instruction for English learners. Third, a consistent disparity exists between students' advanced digital literacy practices outside of school and the primarily print-oriented methods still employed in numerous English classrooms. This gap underscores the necessity for pedagogical models that effectively connect authentic digital participation with the acquisition of academic English skills.

Addressing these gaps, the present study aims to conceptualize how cybergogy can be effectively integrated to advance English language multiliteracies in the era of Society 5.0. The study seeks to identify the pedagogical, technological, and multimodal components needed to design engaging, collaborative, and future-oriented English learning environments. Specifically, it examines the potential of cybergogy to support learners' multiliteracy development, enhance their engagement in digital communication, and bridge the divide between their everyday digital practices and classroom-based English instruction.

To achieve this aim, the study is guided by four research questions that directly structure the investigation and frame the analysis presented in the subsequent sections. First, how can cybergogy be integrated into English language learning to develop multiliteracy competencies in the Society 5.0 era? Second, what multiliteracy skills do learners demonstrate when engaging with cybergogy-based digital learning environments? Third, what pedagogical, technological, and multimodal elements are required to implement an effective cybergogical framework for English multiliteracies? Fourth, how does cybergogy address the gap between students' digital literacy repertoires outside school and the traditional approaches used in English classrooms? Together, these questions provide a comprehensive analytical

direction for exploring a pedagogical model that is both responsive to contemporary digital realities and supportive of learners' participation in global, technology-mediated discourse.

Materials And Methods

Study area

This research was conducted in an eighth-grade English classroom that integrates digital platforms, interactive applications, and multimodal resources into its instructional practices. The study area represents a natural learning environment where cybergogy principles: collaboration, autonomy, and technology-mediated interaction are embedded within everyday classroom activities. Participants in this case study consist of one English teacher and eight eighth-grade students, selected from a total population of 20 learners. Purposeful sampling was used to choose students who were actively engaged in digital learning and capable of providing rich information about the development of multiliteracy skills (Patton, 2002).

The selected classroom meets the criteria for a "bounded system," where the teacher, students, and digital learning activities form a unified case for investigation (Merriam & Tisdell, 2016; Stake, 1995). The environment includes digital literacy practices such as multimodal text creation, online collaboration, virtual discussion, and digital problem solving, making it an ideal context for examining cybergogy-based English learning. Following Yin's (2018) recommendation, the study area is situated in an authentic setting where the boundaries between the phenomenon, cybergogy and multiliteracy and the real-life context naturally interact.

Procedures

The study's data were obtained via classroom observations, semi-structured interviews, digital learning artifacts, and interaction logs from the platform. Classroom observations aimed to document interactions between teachers and students, as well as among students, within a cybergogy-based learning environment. Focus was placed on instructional strategies, multimodal

communication, collaboration patterns, and learner engagement with digital tools. Field notes were meticulously recorded to capture aspects including task design, student responses, and the influence of technology on meaning-making.

Semi-structured interviews were conducted with the teacher and students to examine their perceptions of cybergogy, their experiences with multimodal tasks, and the role of digital tools in supporting language learning. This procedure is consistent with Stake's (1995) focus on comprehending participants' lived experiences in case studies. Digital artifacts, such as multimodal student projects, collaborative writing documents, screenshots, online discussion transcripts, and multimedia products, were gathered to serve as concrete evidence of multiliteracy practices. Furthermore, platform interaction logs were examined to assess student participation, communication patterns, and collaborative behavior in virtual learning environments.

Triangulation involving observations, interviews, artifacts, and participation logs was utilized to strengthen the study's credibility, allowing for an examination of the phenomenon from various perspectives (Yin, 2018).

Data analysis

The data were analyzed using an inductive thematic approach. First, a case database (Yin, 2018) was created to organize all observations, transcripts, and digital artifacts. Open coding revealed key concepts related to multiliteracy development, cybergogy practices, digital engagement, collaboration, and multimodal meaning-making. These codes were refined into broader themes through an axial coding process. This systematic coding laid the foundation for subsequent interpretive steps.

Building on the identified themes, pattern matching and explanation building were then employed to interpret how digital tools, cybergological strategies, and classroom interactions contributed to the emergence of multiliteracy competencies (Stake, 1995). The analysis considered elements such as multimodal composition, hybrid text usage, intertextuality, problem solving, and collaborative meaning-

making, which are central to multiliteracy frameworks.

In the next analytical phase, digital artifacts were analyzed using multimodal discourse analysis to examine how students combined linguistic, visual, audio, gestural, and spatial modes to create and interpret texts. To ensure trustworthiness, techniques such as triangulation, member checking, thick description, and reflexive documentation were applied (Merriam, 2009). These validation strategies helped confirm that the findings accurately represented participants' experiences within the cybergogy-based English learning environment.

Results And Discussion

Result

The purpose of this study was to examine how cybergogy can be integrated into English language learning to promote multiliteracy competencies among eighth-grade students in the Society 5.0 era. To address this aim, the findings presented in this chapter synthesize data collected through semi-structured interviews with one English teacher and eight students, classroom observations, and an analysis of student-produced digital artifacts. These complementary data sources provide a comprehensive account of how cybergogy operates in an English classroom and how learners respond to its multimodal and technology-rich features.

The presentation of results is organized around the four research questions guiding this study. The first section discusses how cybergogy was integrated into English learning activities and how students engaged with digital and multimodal tasks. The second section explores the multiliteracy competencies demonstrated by students, focusing on linguistic, visual, spatial, digital, and critical literacies. The third section identifies the pedagogical, technological, and multimodal elements required to support an effective cybergogical learning environment, highlighting the interplay between instructional scaffolding and digital tool accessibility. The final section examines the extent to which cybergogy bridges the gap between students' out-of-school digital experiences

and the literacy expectations of traditional English classrooms. Together, these findings provide both empirical and interpretive insights into the role of cybergogy in shaping learners' multiliteracy development in the age of Society 5.0.

Integrating Cybergogy into English Learning to Develop Multiliteracy Competencies

The integration of cybergogy into the English classroom unfolded as a dynamic, exploration-driven process in which students engaged with digital tools through hands-on experimentation. From the beginning of the implementation, students demonstrated strong familiarity with mobile-based applications, which shaped the way they interacted with cybergogy-based tasks. Rather than waiting for explicit instructions, many students immediately explored the features of Canva, and mobile video editor, testing templates, adding images, adjusting animations, or experimenting with audio narration. This pattern suggested that cybergogy aligned naturally with the digital habits students had already developed outside school.

Teacher observations supported this shift toward exploratory learning. The teacher noted that cybergogy altered the typical classroom dynamic by allowing students to engage more independently:

"When I used cybergogy, students became more active. They explored the tools first before asking questions."

This observation reflects a pedagogical shift from teacher-led instruction toward learner-centered discovery. Instead of relying on step-by-step guidance, students used their prior digital knowledge to navigate the tools, only seeking help when encountering challenges beyond their familiarity. This behavior aligned with cybergogical principles that emphasize learner autonomy, inquiry-based interaction, and meaningful engagement mediated through technology.

Interviews with students further revealed that cybergogy made English tasks feel less constrained and more enjoyable. Several learners explained that using their phones for classwork felt natural

because it mirrored the activities they routinely performed at home. As student A noted:

“Pakai HP buat tugas itu biasa aja, kayak ngedit video buat hiburan.”

(Using my phone for assignments feels normal, like editing videos for fun)

This perspective highlighted that cybergogy bridged the gap between students’ everyday digital practices and formal academic tasks, making English learning feel more authentic and personally relevant.

Classroom observations also showed that cybergogy fostered greater collaboration among students. Groups formed organically, with individuals demonstrating features they discovered, sharing shortcuts, or offering quick solutions to technical issues. This peer-based knowledge exchange reduced reliance on the teacher, increased learners’ confidence, and accelerated the pace of task completion.

The integration of cybergogy into English learning resulted in increased engagement, independent exploration, and collaborative construction of meaning. The familiarity of students with digital tools beyond the classroom provides a basis for academic application, allowing cybergogy to act as a link between informal digital literacies and formal English instruction.

Multiliteracy Skills Demonstrated by Students

Across the cybergogy-based learning activities, students demonstrated a diverse and interconnected range of multiliteracy skills. Their linguistic literacy was evident as they composed English captions, descriptive sentences, and short narrative scripts for their videos. Many students revised their sentences repeatedly after listening to their own recorded audio, suggesting an awareness of clarity, pronunciation, and textual coherence. These revisions often occurred collaboratively, with peers suggesting vocabulary alternatives or correcting grammatical errors based on their own understanding.

Students also displayed strong visual literacy, particularly in their ability to design digital posters and multimedia compositions. They selected images that aligned with the theme of their narratives, experimented with color schemes,

adjusted the placement of text for readability, and refined the layout to achieve balance and visual appeal. These choices were intentional; several groups replaced their initial background images when they realized that the text appeared too crowded or visually distracting, demonstrating their growing sensitivity to multimodal design principles.

In addition, students exhibited increasing digital literacy throughout the project. They navigated various features within Canva and other editing platforms, such as inserting images, adjusting layers, cropping visuals, and applying transitions or animations. Students who initially expressed uncertainty became more confident after experimenting with the tools and observing their peers. Peer assistance played a significant role in this growth; students frequently took turns demonstrating steps, guiding others through menu options, or troubleshooting small errors.

Their engagement with external materials also reflected emerging critical literacy. When searching for supporting images, short video clips, or information online, students compared the clarity, relevance, and appropriateness of different sources. Several groups discarded images they deemed outdated or unrelated to their topic and selected new ones that better matched the narrative they were constructing. In doing so, they demonstrated an understanding that creating meaning in digital contexts requires not only assembling multimodal elements, but also evaluating their quality and suitability.

The learning process ultimately demonstrated significant collaborative literacy. Students naturally divided responsibilities based on individual strengths: one student might record the narration, another write the text, while a third managed the visual design or final editing. This division of labor emerged without explicit instruction from the teacher. As student C explained, *“Saya nggak bisa edit, jadi teman saya yang edit. Saya nulis teksnya saja,”* indicating that the group assigned roles pragmatically according to comfort and competence. This fluid collaboration became a defining feature of their work, enabling each group to produce coherent and polished multimodal texts that reflected collective decision-making.

Taken together, these observations demonstrate that cybergogy fostered a rich environment in which students could activate and expand multiliteracy skills across linguistic, visual, digital, critical, and collaborative domains.

Pedagogical, Technological, and Multimodal Requirements for Effective Cybergogy

The effectiveness of cybergogy in the English classroom depended heavily on a combination of pedagogical support, technological accessibility, and multimodal task design. A consistent pattern across observations was the importance of clear pedagogical modeling. Students repeatedly expressed that they understood tasks more easily when provided with concrete examples before beginning independent work. Whenever the teacher showed a sample poster or demonstrated the steps for creating a video narration, students referred back to it throughout the lesson, pointing to specific features they wished to replicate. Conversely, in sessions where the teacher initially withheld modeling, students hesitated, asked for reassurance, or waited for peers to make the first attempt, indicating that modeling played a critical role in fostering confidence and reducing uncertainty.

Technological accessibility functioned as another key requirement. The teacher observed that students worked more efficiently when platforms were simple, intuitive, and similar to applications they already used in everyday life. During the early stages, students were introduced to a more complex video-editing application, which led to confusion and delays. After switching to a more familiar and user-friendly platform, students progressed much more quickly and required fewer clarifications. The teacher summarized this observation succinctly: "If the tools are simple, students work faster." Students' interactions also showed that accessible technology supported peer teaching; more experienced students guided their peers through the interface, lowering the overall cognitive load for the group.

The final requirement involved the inclusion of open-ended multimodal design tasks characterized by flexible role distribution. Students demonstrated enhanced engagement and

produced superior work when assignments permitted the integration of text, images, narration, and sound in alignment with their individual strengths. In group projects, participants typically selected roles—such as scriptwriting, visual editing, or audio recording—that aligned with their preferences, sustained motivation, and alleviated pressure on individuals who faced challenges in particular areas. This flexibility facilitated student experimentation and role-switching as they developed confidence in new multimodal skills.

The results suggest that cybergogy is most effective when instructional activities are based on clear modeling. Technology should be both accessible and intuitive. Multimodal tasks ought to provide students with the autonomy to choose their modes and roles. These conditions collectively establish a learning environment that enables students to confidently engage with digital tools and generate significant multimodal English texts.

Cybergogy's Role in Bridging the Gap Between Students' Out-of-School Digital Literacies and School-Based English Learning

The findings demonstrate that cybergogy played a crucial role in narrowing the long-standing gap between students' rich digital literacy practices outside school and the more traditional, textbook-centered activities commonly used in English classrooms. Prior to the intervention, students described English lessons as "text-heavy" and "monotonous," emphasizing that digital tools were rarely used for academic purposes. The teacher similarly acknowledged this misalignment:

"Students used digital media every day, but in English class before, they almost never used it."

This mismatch created a disconnect between students' lived experiences and school expectations, leaving their digital competencies underutilized in academic contexts.

Cybergogy helped realign these spaces by providing opportunities for students to apply familiar digital skills: editing videos, adding music, arranging layouts, using filters or transitions to complete English assignments. These activities allowed students to blend academic content with

the multimodal practices they regularly engage in through social media or entertainment apps. During observations, students frequently incorporated elements such as emojis, sound effects, stickers, and animated text. While these features were playful, they also reflected students' ability to leverage personal digital repertoires to construct meaning in English. This blend of academic and everyday literacies made learning feel more relatable and less intimidating.

Student E interview excerpts illustrate this shift in perception:

"Belajar pakai video itu kayak main, nggak kayak tugas sekolah."

"Learning with videos feels like playing, not like schoolwork."

Students reported feeling more comfortable expressing ideas when allowed to use modes beyond writing, such as audio narration or visual design. Learners who previously struggled with written English found alternative pathways to participate meaningfully, such as selecting images, arranging visual elements, or recording spoken explanations. These opportunities validated students' existing digital strengths and broadened the modes through which they could demonstrate understanding.

Furthermore, cybergogy promoted a learning environment that encouraged students to engage in greater academic risk-taking. The researchers utilized unfamiliar tools, explored novel editing techniques, and revised their multimodal products repeatedly. The decrease in performance anxiety was especially noticeable among students who typically refrained from engaging in conventional lessons; these individuals exhibited increased confidence when utilizing digital tools that appeared familiar and empowering.

Cybergogy effectively connects informal digital literacies with formal English learning. Cybergogy facilitated the transformation of the English classroom into a more inclusive, engaging, and culturally responsive learning environment by validating students' existing digital practices, expanding their modal choices, and reducing barriers to participation.

Discussion

Integrating Cybergogy into English Language Learning

The findings for this matter reveal that cybergogy creates a learning environment characterized by autonomous exploration, high student engagement, and fluid interaction with digital tools. Students' tendency to explore applications before receiving explicit instruction aligns strongly with the concept of new ethos literacies (Shahzadi & Surif, 2023; Zahid & Nawab, 2025), which foreground participation, exploration, and self-initiated inquiry. Instead of waiting for teacher guidance, learners used their prior digital experiences to make sense of the tools, indicating that cybergogy bridges informal and formal learning spaces. This outcome echoes Jenkins et al. (2016), who emphasize that today's youth engage in participatory digital cultures that rely heavily on self-directed learning.

The teacher's observation that students were "more active" and "explored the tools first" indicates a shift from teacher-centered to learner-centered instruction, a pedagogical movement foundational to cybergogy (Rahma et al., 2021). This finding also parallels the principles of Society 5.0, where digital technologies augment human-centered problem-solving and knowledge creation (Alves et al., 2023; Nasir et al., 2025). By enabling learners to manipulate tools independently, cybergogy transforms the classroom into a hybrid cyber-physical space where students navigate tasks using competencies developed in their everyday digital environments.

Furthermore, the finding that students saw digital-based English learning as "natural" or "fun" confirms prior research. School learning often fails to connect with students' lived digital experiences (Aldhafeeri & Alotaibi, 2022; Haleem et al., 2022; Yun & Kim, 2025). Cybergogy disrupts this pattern by validating students' existing digital practices and embedding them in academic tasks. This strong alignment between students' digital cultures and academic outcomes suggests cybergogy not only increases motivation but also enhances relevance and authenticity in English language learning.

Multiliteracy Skills Demonstrated by Students

The multiliteracy skills demonstrated by students during the project offer strong evidence that cybergogy provides fertile ground for multimodal meaning-making. Students' ability to compose, revise, and refine English captions and audio narrations suggests growth in linguistic literacy, while their deliberate visual choices—image selection, layout balancing, and aesthetic refinement—demonstrate advanced visual literacy. These findings resonate with the multiliteracies framework proposed by (Cazden et al., 1996), which asserts that literacy in the contemporary era involves designing meanings across multiple modes rather than relying solely on traditional print-based competencies.

Students' navigation of Canva and other editing tools illustrates expansion in digital literacy, aligning with Gilster's (1997) notion of digital literacy as the ability to use technology critically and creatively. Their capacity to evaluate online image quality and relevance reflects critical literacy, which is essential for navigating the saturation of information in digital spaces (Silvhiany et al., 2021; Yu et al., 2024). Meanwhile, students' self-organized collaboration aligns with Vygotsky's (1978) view of learning as fundamentally social and coconstructed. Group work developed organically, with roles evolving dynamically, demonstrating how multimodal pedagogies can facilitate adaptable and inclusive participation, an idea consistent with Mills's (2010) broader assertion that multiliteracies foster opportunities for learners with diverse strengths.

Taken together, these outcomes indicate that cybergogy functions as a multiliteracies accelerator: it does not teach literacy in isolation but instead orchestrates simultaneous growth in linguistic, visual, digital, collaborative, and critical literacies, all of which are essential for learners in the Society 5.0 era.

Pedagogical, Technological, and Multimodal Requirements for Effective Cybergogy

The findings for this question highlight three key requirements for the effective implementation of cybergogy: (1) clear pedagogical modeling, (2) accessible technology, and (3) open-ended

multimodal task structures. The importance of modeling aligns with Mayer's (2009) cognitive theory of multimedia learning, which emphasizes that learners benefit from guided demonstrations that reduce cognitive load. When the teacher provided exemplar posters or narrated videos, students used these models as anchors for their own creative decision-making, reinforcing observations from previous research on multimodal scaffolding (Norberg & Dahlström, 2023; Pacheco et al., 2021).

Technological accessibility emerged as equally crucial. When students used tools similar to those they encounter daily on social media platforms, their confidence and efficiency increased significantly. Jansen et al., (2000) argues that digital learning environments must be designed around learners' existing digital repertoires for meaningful engagement to occur. This study provides empirical support for that claim: students achieved greater progress when tools were intuitive, visually familiar, and compatible with mobile devices.

Open-ended multimodal tasks also proved essential for supporting multimodal creativity and differentiated learning. Students demonstrated greater engagement and contributed more effectively when allowed to select roles such as writing, editing visuals, and recording audio, aligning their tasks with their individual strengths. This flexibility is consistent with (Fedorenko & Kravchenko, 2023) argument that multimodality expands the representational resources available to learners, thereby enhancing motivation and inclusion. The results affirm that cybergogy is most effective when it allows for diverse pathways to success, enabling learners to design, experiment, and communicate using modalities that best align with their abilities and preferences.

Cybergogy's Role in Bridging the Gap Between Students' Out-of-School Digital Literacies and Classroom English Practices

The final research question addresses one of the core challenges in contemporary literacy education: the persistent mismatch between students' out-of-school digital literacies and the more traditional forms of literacy emphasized in school (Audrin & Audrin, 2022; Haleem et al., 2022; Marissa &

Hamid, 2022). The findings indicate that cybergogy serves as a powerful bridge between these two domains. Students often indicated that multimodal English tasks mirrored the digital activities they engaged in outside of school, such as editing short videos, incorporating background music, choosing images, or designing visual layouts. This observation implies a significant continuity between personal and academic digital practices.

This continuity reinforces the argument that literacy is a socially situated practice shaped by context and culture (Sangaji et al., 2023; Ungureanu, 2024). Cybergogy does not treat digital skills as extracurricular or peripheral; instead, it embeds them into academic tasks, effectively narrowing the cultural and cognitive distance between home and school literacies. Students' increased participation, reduced anxiety, and higher confidence suggest that cybergogy affirms their existing digital practices and identities. This aligns with Paris & Alim's (2017) framework of culturally sustaining pedagogy, which emphasizes validating learners' contemporary cultural and digital literacies in classroom settings.

Moreover, permitting alternative modes of expression, including audio narration and visual design, facilitated access for students with difficulties in written English, enabling them to engage meaningfully in the learning process. This aligns with the findings of (Abdulrahman et al., 2020; Kritsotaki et al., 2025; Sutrisno et al., 2024), who contend that multimodal tasks enhance classroom participation by offering various pathways for meaning-making. Embracing students' everyday digital practices allows cybergogy to transform the English classroom into a more inclusive and socially responsive environment.

The findings for this question indicate that cybergogy not only enhances engagement but also transforms the epistemological foundations of English learning by acknowledging and utilizing the diverse literacies students engage with in their everyday digital experiences.

Conclusions

This research investigated the integration of cybergogy into English language learning to enhance multiliteracy competencies among eighth-grade students in the context of Society 5.0. The findings suggest that cybergogy fosters a learning ecosystem characterized by active, autonomous, and multimodal student engagement. Students utilized digital tools to leverage their everyday digital literacies, including video editing, image selection, layout arrangement, and audio recording, to complete English tasks effectively and with confidence. This behavior indicates that cybergogy is inherently compatible with students' digital experiences, enhancing the intuitiveness and intrinsic motivation of academic learning.

The results also demonstrate that cybergogy supports the development of multiple literacies simultaneously. Students strengthened their linguistic literacy through captioning and narration; visual literacy through layout and color decisions; digital literacy through tool navigation; critical literacy through online evaluation; and collaborative literacy through self-organized teamwork. These interconnected competencies reflect the characteristics of multiliteracies in the digital era, where meaning is constructed across modes rather than through written language alone.

Furthermore, the study identified several pedagogical and technological conditions that enable effective implementation of cybergogy. Clear modeling helped reduce cognitive load, while intuitive and mobile-friendly tools allowed students to work efficiently. Open-ended multimodal tasks encouraged students to participate according to their strengths, making English learning more inclusive and equitable. These elements underscore the need for purposeful instructional design that prioritizes multimodal production, student autonomy, and cyber-mediated creativity.

The study concluded that cybergogy effectively connects students' digital skills acquired outside of school with conventional literacy practices in the classroom. Embedding familiar multimodal tasks into English learning validates students' identities as digital creators and positions the classroom as a

space that reflects real-world communicative practices. This alignment improves relevance, mitigates student anxiety, and fosters deeper engagement. Besides that, cybergogy serves as an effective and forward-looking pedagogical model for fostering English multiliteracies in the Society 5.0 context. The approach converts English learning into an interactive, multimodal, and student-centered process, equipping learners to participate in digitally mediated communication with confidence and creativity.

The findings of this study have several important implications for English language education in the era of Society 5.0. Pedagogically, teachers need to adopt instructional approaches that emphasize multimodality, learner autonomy, and inquiry-based exploration, shifting their role from content transmitters to facilitators who guide students through digital and multimodal meaning-making. Technologically, schools must ensure access to intuitive and mobile-friendly platforms supported by adequate connectivity and teacher digital competence. Curricularly, English programs should integrate multimodal and cyber-based learning tasks that mirror students' everyday digital practices, thereby making classroom learning more relevant and inclusive. Theoretically, the study reinforces the validity of multiliteracies and cybergogy as frameworks that accurately reflect the changing nature of literacy in digitally mediated environments.

Based on these implications, several recommendations are proposed. Teachers are encouraged to regularly incorporate cybergogy through accessible digital tools, provide clear modeling before multimodal tasks, and allow flexible role distribution to accommodate diverse student strengths. Schools should support this practice by improving technological infrastructure, offering professional development in digital and multimodal pedagogy, and embedding cyber-based literacy goals into the curriculum. Future research should explore cybergogy in broader contexts, examine its long-term effects on multiliteracy development, and investigate how learners with varying levels of digital proficiency can be best supported within cybergogical environments.

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