



**BETWEEN SCREEN AND SCRIPT: QUR'ANIC PERSPECTIVES ON HANDWRITING
IN THE DIGITAL AGE**

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ABSTRACT

In the current educational environment, rapid digitalization, mobile computing, online learning platforms, and artificial intelligence tools are reshaping how students read, write, store information, and engage with academic content. This paper examines the continuing relevance of handwriting within Muslim higher education, with particular attention to the School of Sharia and Islamic Studies at Umma University. The study investigates students' perceptions of handwriting, the extent of digital dependency in their academic practices, and the educational and spiritual significance of writing from a Qur'anic perspective. A qualitative case study design was adopted, supported by questionnaires, semi-structured interviews, observation, and document review involving students and lecturers. The findings indicate that although students widely recognize the value of handwriting, current learning practices are increasingly dominated by smartphones, laptops, downloaded notes, and AI-assisted academic support tools. The study further shows that regular handwriting remains strongly associated with improved concentration, memory retention, comprehension, reflective thinking, and stronger engagement with scholarly material. The paper concludes that the current challenge is not whether technology should be used, but how institutions can maintain a balanced literacy model in which digital innovation complements rather than displaces reflective handwriting practices.

Keywords: Handwriting, Digital Dependency, Reflective Learning, Islamic Education, Literacy, Technology

Introduction and Background

Writing has historically served as one of the most important foundations of human civilization because it enables the preservation, transmission, and expansion of knowledge across generations (Mueller & Oppenheimer, 2014). In Islamic intellectual tradition, writing holds an even deeper significance because the Qur'an connects reading, writing, and the pen to knowledge, reflection, and human development (Qur'an 68:1; Qur'an 96:4). The symbolic and practical importance of the pen is therefore not limited to communication; it also represents accountability, preservation of truth, scholarship, and civilizational continuity (Van der Weel & Van der Meer, 2024).

In the current era, however, educational practice has shifted significantly due to the widespread use of smartphones, laptops, tablets, online learning systems, and artificial intelligence applications. Students increasingly access lecture materials electronically, communicate through digital platforms, and prepare assignments using technology-supported environments (Wolf, 2018). While these developments have improved speed, convenience, storage, and access to information, they have also reduced the centrality of handwriting in everyday academic life.

Within Muslim educational institutions, this transition raises both pedagogical and philosophical concerns. Historically, Islamic scholarship flourished through reading, annotation, note-taking, commentary writing, manuscript preservation, and disciplined intellectual documentation. The current decline in handwriting therefore represents more than a change in technique; it reflects a broader shift in learning culture from deliberate reflection toward faster and more fragmented engagement with information (Bakar, 2021; Carr, 2020).

This paper revises and presents the study in a more professional and technical form by situating it within the current status of higher education, where digital dependency is increasing while the educational, cognitive, and spiritual relevance of handwriting remains substantial.

Statement of the Problem

Current higher education systems are increasingly shaped by digital learning environments in which students rely on mobile devices, cloud platforms, downloaded content, and AI-assisted tools for reading, note-taking, research, and assignment preparation. Although these tools improve efficiency and access, they may also encourage superficial engagement with knowledge, shortened attention spans, reduced reflective writing, and weaker handwritten note-taking habits.

For Muslim students, the problem is particularly important because Islamic intellectual heritage places strong emphasis on literacy, disciplined scholarship, documentation, and the preservation of knowledge through writing. Despite this tradition, limited institution-based research has examined how contemporary Muslim university students perceive handwriting under current digitally dominated learning conditions. This creates a gap in understanding the relationship between handwriting, digital dependency, and reflective learning within Islamic higher education.

Objectives of the Study

The study was guided by the following objectives:

- To examine the value of handwriting from a Qur'anic and educational perspective among students at Umma University.
- To assess students' attitudes toward handwriting in the current digital learning environment.

- To analyze the effects of excessive dependence on digital tools on handwriting practices and learning behavior.
- To examine the relationship between handwriting, concentration, comprehension, and memory retention.
- To identify practical strategies for revitalizing handwriting within a balanced digital education model.

LITERATURE REVIEW

Writing in Islamic Epistemology

Writing occupies a central place in Islamic epistemology because it is a key mechanism for preserving, organizing, and transmitting knowledge. The Qur'anic references to reading and the pen establish a foundation for literacy that is intellectual, moral, and spiritual in character. Classical and contemporary Islamic scholars consistently treat writing as a disciplined scholarly act through which beneficial knowledge is retained, communicated, and protected (Al-Ghazali, 2004; Al-Attas, 1995).

Within this framework, handwriting is not merely a technical skill. It is closely related to reflection, intellectual responsibility, and the continuity of scholarly culture. In the current educational context, where fast digital interaction often replaces deliberate writing, this Islamic perspective remains highly relevant to debates on meaningful learning and knowledge preservation.

Handwriting and Cognitive Development

The reviewed study content shows that handwriting remains closely associated with concentration, comprehension, memory retention, and deeper engagement with learning materials. Unlike rapid digital transcription, handwriting requires learners to summarize, reorganize, and cognitively process information in a more deliberate manner (Mueller & Oppenheimer, 2014). This supports reflective learning and strengthens conceptual understanding.

From a current-status perspective, the issue is not whether digital tools are useful, but whether exclusive dependence on them may weaken cognitive habits that are supported by handwritten engagement. The evidence presented in the document suggests that handwriting continues to function as an important cognitive instrument within contemporary higher education (Van der Weel & Van der Meer, 2024).

Digital Dependency in Current Learning Contexts

The current educational environment is characterized by extensive use of smartphones, laptops, learning management systems, online resources, and AI-enabled academic tools. These technologies increase accessibility and flexibility, but they also shift students toward rapid content consumption, copied notes, electronic storage, and screen-based learning habits (Carr, 2020; Wolf, 2018).

The reviewed manuscript indicates that students now perform many tasks digitally that were previously completed through handwritten engagement. This change has contributed to reduced writing endurance, weaker note-making habits, and fewer opportunities for reflective interaction with course content (Günaydın, 2026; Wolf, 2018). The present status of higher education therefore calls for a balanced literacy approach in which digital fluency is strengthened without abandoning the intellectual benefits of handwriting (Dincer, 2026; Lee *et al*, 2024).

Digital Literacy within Muslim Educational Institutions

Digital literacy has become an increasingly important component of contemporary higher education, including within Islamic educational institutions. The concept extends beyond the ability to operate digital devices and encompasses the skills required to access, evaluate, create, communicate, and manage information effectively in digital environments. Recent studies indicates Islamic higher education institutions are increasingly integrating digital literacy into teaching, learning, and research activities as part of broader educational modernization efforts (Sunan *et al.*, 2023).

The adoption of digital technologies in Islamic universities has accelerated significantly over the last decade. Learning management systems, digital libraries, online assessment platforms, virtual classrooms, and blended learning approaches have transformed how students access and engage with knowledge. Research conducted in Islamic higher education institutions demonstrates that digital technologies improve access to educational resources, facilitate communication between lecturers and students, and support more flexible learning environments. Al Musanna *et al.*(2026) found that blended learning approaches enhanced the integration of digital literacy within Islamic studies programmes and improved students' access to educational content.

Despite these advantages, scholars caution that rapid digitalization may unintentionally weaken some traditional educational practices that have historically characterized Islamic learning. Classical Islamic education emphasized direct engagement with texts through reading, annotation, memorization, note-taking, commentary writing, and manuscript study (Badruzzaman & Supratama, 2026). These practices encouraged patience, concentration, critical reflection, and intellectual discipline. Historically, students often maintained personal notebooks and handwritten commentaries as part of their scholarly development, allowing them to engage deeply with knowledge rather than merely consume information. This tradition contributed significantly to the preservation and transmission of Islamic civilization's intellectual heritage.

METHODOLOGY

The study adopted a qualitative case study design focusing on the School of Sharia and Islamic Studies at Umma University. The target population comprised undergraduate students and lecturers, with participants selected through purposive and simple random sampling. A total of 35 participants took part in the study, consisting of 30 students and 5 lecturers.

Data collection methods included questionnaires, semi-structured interviews, and non-participant observation. The instruments explored handwriting practices, digital device usage, note-taking behavior, perceived learning benefits, and awareness of Islamic teachings on writing. Data were analyzed thematically, while descriptive summaries were used to organize closed-ended responses.

FINDINGS AND DISCUSSION

Current Status of Handwriting Practice

The findings show that students generally continue to value handwriting, but its actual use has declined under current digital learning conditions. For many participants, handwriting is now concentrated mainly in examinations, selective classroom note-taking, or specific written tasks, while most routine academic engagement takes place through digital platforms and devices.

This indicates that handwriting has not disappeared, but its role has become narrower and more situational. In practical terms, the current status can be described as one of partial displacement, where digital convenience dominates everyday academic work even though students still recognize the educational value of handwriting.

Digital Dependency and Academic Behavior

A major finding of the study is the strong dependence on digital tools for accessing lecture notes, preparing assignments, communicating with lecturers, and storing academic content. Students preferred digital resources because they are faster, easier to share, and more convenient to organize.

Lecturers also observed a clear shift from traditional note-making toward device-based learning. In the current context, the expansion of AI-assisted content generation and electronic academic support systems further increases the likelihood that students will engage less directly in reflective writing processes.

Handwriting and Learning Outcomes

The study findings indicate that students who regularly practice handwriting report better concentration, stronger memory retention, and improved understanding of academic material. Lecturers similarly associate handwritten engagement with stronger classroom participation, more effective summarization of content, and deeper conceptual grasp.

These findings suggest that handwriting remains pedagogically relevant even under present-day digital conditions. Rather than being an outdated practice, it continues to serve as a mechanism for active learning, intellectual discipline, and meaningful academic engagement.

Islamic Significance of Writing

Participants demonstrated awareness that writing occupies an important place in Islamic thought, especially through Qur'anic references to reading and the pen. However, the findings also suggest that many students had not deeply connected these teachings to their present academic habits and learning strategies.

This gap is important in the current status of Islamic higher education. It shows that awareness of sacred literacy values exists, but practical academic culture is increasingly shaped by convenience-driven digital habits rather than by reflective traditions of writing and documentation.

Challenges Affecting Handwriting Culture

The principal challenges identified include the speed and convenience of typing, extensive use of online learning systems, electronic assignment submission, digital communication, and reduced motivation for sustained manual writing. These factors have collectively reduced the frequency with which students engage in extensive handwriting outside mandatory academic situations.

The current challenge is therefore systemic rather than personal alone. It is embedded in contemporary teaching methods, digital infrastructure, and changing study habits across higher education.

Strategies for Revitalization

The study proposes a balanced response rather than a rejection of technology. Suggested strategies include encouraging structured handwritten note-taking, integrating reflective writing exercises into

coursework, promoting journaling, strengthening awareness of Islamic manuscript traditions, and designing learning tasks that require personal synthesis rather than mere digital retrieval.

In the current educational climate, these strategies are best understood as complementary interventions. They aim to preserve the cognitive and intellectual value of handwriting while still allowing institutions and students to benefit from the efficiency of digital systems.

Conclusion

The professionally revised analysis shows that handwriting remains educationally, cognitively, and spiritually relevant despite the current dominance of digital technologies in university learning environments. At Umma University, students and lecturers recognize that handwriting supports concentration, comprehension, memory retention, and reflective learning, even though everyday academic practice is increasingly shaped by smartphones, laptops, online resources, and AI-assisted tools.

The current status is therefore one of tension rather than replacement. Digital tools have become indispensable to academic life, but they should not be allowed to displace handwriting entirely because doing so may weaken reflective scholarship and diminish an important element of Islamic intellectual tradition. A balanced literacy model that integrates technological innovation with structured handwriting practice is the most appropriate institutional response.

Recommendations

- Integrate structured handwritten note-taking activities into selected courses to preserve reflective engagement with learning.
- Introduce reflective writing exercises, learning journals, and analytical summaries that require manual knowledge processing.
- Strengthen institutional awareness of the Islamic intellectual heritage of writing through seminars, manuscript studies, and literacy-centered programmes.
- Promote responsible use of AI and digital tools as academic support mechanisms rather than substitutes for independent thinking and writing.
- Develop a balanced literacy policy that recognizes both digital competence and handwriting as complementary academic capabilities.

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