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Abstract

This study aimed to seek an in-depth understanding of digital trends among Islamic university students to use their literacy well and balanced on the positive internet. We believe that students' success using the facilities of digital technology is closely related to their proficiency in ICT. In order to understand easily, we chose the research method of research on the data findings that have been published in several journals that we can access with the Google Scholar data search engine published from 2010 to 2021.We involve analytical studies under the phenomenological approach to finding valid and reliable data. In the data review process, for example, we analyze data, evaluate, and critically interpret before drawing conclusions that answer the questions of this study. So one of the findings is that students can access lecture material using digital media skills to understand digital literacy. Their digital literacy is present positively and wisely because they have received training and use digital technology in a balanced way to make digital media an additional source of reference for proper and balanced lecture, game, and entertainment materials. These findings should be helpful in the development of future studies.

Keywords: digital literacy; Islamic students; information technology trends; positive internet; publication review

Abstrak

Penelitian ini bertujuan untuk memahami secara mendalam tentang tren digital di kalangan mahasiswa Islam dalam menggunakan kemampuan literasi mereka secara baik dan seimbang melalui internet yang positif. Kami percaya bahwa keberhasilan mahasiswa dalam menggunakan fasilitas teknologi digital berkaitan erat dengan kemampuan mereka dalam penguasaan Teknologi Informasi dan Komunikasi. Agar mudah dipahami, dalam studi ini kami memilih metode penelitian dengan cara mengkaji data temuan yang telah dipublikasikan di beberapa jurnal yang dapat kami akses melalui mesin pencari data Google Scholar yang diterbitkan dari tahun 2010 hingga 2021. Kami menggunakan studi analitik dengan pendekatan fenomenologis untuk menemukan data yang valid dan reliabel. Dalam proses telaah data, misalnya, kami menganalisis data, mengevaluasi, dan menginterpretasikan secara kritis sebelum menarik kesimpulan untuk menjawab pertanyaan penelitian ini. Sehingga salah satu temuannya adalah mahasiswa dapat mengakses materi perkuliahan menggunakan keterampilan media digital untuk memahami literasi digital. Literasi digital mereka hadir secara positif dan konstruktif karena mereka telah mendapatkan pelatihan serta menggunakan teknologi digital secara seimbang untuk menjadikan media digital sebagai sumber referensi tambahan untuk materi kuliah, game, dan hiburan yang tepat dan seimbang. Temuan ini akan sangat bermanfaat dalam pengembangan kajian-kajian serupa di masa mendatang.

Kata Kunci: Literasi digital; mahasiswa Islam; tren teknologi informasi; internet positif; ulasan publikasi

A. Introduction

Today's development of science and technology has brought humans to a swift pace of life and requires humans who follow technological developments to improve their skills and roles¹. Various inventions of data technology such as mobile phones, computers, laptops, social media applications, and web networks are the key to responding to these changing needs, both communicating and interacting without boundaries of place and time. The accelerated advances in information technology have become the basis for developing the idea of the industrial revolution 4.0 worldwide². It also has an impact on the social paradigm of society, including developing countries

¹ Zulfika Satria Kusharsanto and Luky Pradita, "The Important Role of Science and Technology Park towards Indonesia as a Highly Competitive and Innovative Nation," *Procedia - Social and Behavioral Sciences* 227, no. November 2015 (2016): 545–52, https://doi.org/10.1016/j.sbspro.2016.06.113.

² Min Hwa Lee et al., "How to Respond to the Fourth Industrial Revolution, or the Second Information Technology Revolution? Dynamic New Combinations between Technology, Market, and Society through Open Innovation," *Journal of Open Innovation: Technology, Market, and Complexity* 4, no. 3 (2018), https://doi.org/10.3390/joitmc4030021.

like Indonesia. For understanding, the Industrial revolution 4.0 is an era of a technological revolution that changes the breadth, size, complexity, and transformation of human activities from traditional past life experiences to a new era of life assisted by multi-dimensional technology. Humans will even live in global uncertainty. Therefore, humans must be able to anticipate swift future changes. Every nation needs an integrated and comprehensive response to these developments ³In order to overcome the problems of Industry 4.0, this reaction involves all global political players from the government, commercial, academic, civil society, and interfaith communities' sectors.

The industrial revolution is an industrial consumer that emphasizes humans and must be able to use industrial technology creatively, both as a producer and creator of all technology models, including creators of digital applications for academic and works purposes. Shariman⁴ states that digital literacy can understand and use various digital sources for many uses in life and work. They believe that in many settings, such as academia, profession, and daily life, digital literacy can utilize technology and information on digital devices effectively, efficiently, intelligently, and responsibly along with the more evenly distributed technology. Thus, it is easier for the public to get and share the content they need regardless of whether or not content or news is legal to get information from the latest media. With the flexibility and effectiveness of digital application devices connecting to the internet, individuals are shifting attention from printed media to their technological equipment⁵. Increased commercial possibilities in e-commerce, the creation of new jobs in digital media, and the development of reading skills without denying printed texts are also provided by the growth of digital media⁶.

In addition, digital literacy technology is not only now owned by students who are indeed required to be quasi-technology, now professions such as motorcycle taxis or taxis, social media analytics, and social media marketing are increasingly developing in

³ Min Xu, Jeanne M. David, and Suk Hi Kim, "The Fourth Industrial Revolution: Opportunities and Challenges," *International Journal of Financial Research* 9, no. 2 (2018): 90–95, https://doi.org/10.5430/ijfr.v9n2p90.

⁴ Tenku Putri Norishah Tenku Shariman, Norizan Abdul Razak, and Nor Fariza Mohd. Noor, "Digital Literacy Competence for Academic Needs: An Analysis of Malaysian Students in Three Universities," *Procedia - Social and Behavioral Sciences* 69, no. Iceepsy (2012): 1489–96, https://doi.org/10.1016/j.sbspro.2012.12.090.

⁵ UNICEF, State of the Worlds Children 2017 - Children in a Digital World, Unicef, 2017, https://www.unicef.org/publications/index_101992.html.

⁶ Jean M. Twenge, Gabrielle N. Martin, and Brian H. Spitzberg, "Trends in U.S. Adolescents' Media Use, 1976-2016: The Rise of Digital Media, the Decline of TV, and the (Near) Demise of Print," *Psychology of Popular Media Culture* 8, no. 4 (2018): 329–45, https://doi.org/10.1037/ppm0000203.

the digital era, and they are already very proficient and able to work effectively. Rely on digital intelligence. However, ⁷said that more and more teenagers in the millennial era are joining social media because they need information not only for education but also for work information and entertainment trends. He also added that the growth and development of internet technology led to the excessive use of technology by young people both in urban and rural areas ⁸. One of them is using the internet to find material that is not age-appropriate and not based on specific interests.

Moreover, the current use of social networks is mainly based on reasons of personal identification in the sense that building relationships with others is essential. It is done by changing the status or responding to comments or pictures posted to each other's social media profiles⁹. Advances in internet technology, such as enhancing cognitive and psychomotor skills in digital media and research for information relevant to academic tasks, should be studied and used as far as possible for more practical purposes. As a result, many undesirable examples include online bullying, cybercrimes, and sexual violence among young people¹⁰.

In addition, it has been shown that the digital literacy skills of adolescents and students should be introduced to Internet literacy for educational purposes, which is part of the path of piety. The positive internet among Islamic students must work by avoiding student content days with nothing to do with lecture content. Oktiani et al.(2020)¹¹ examine the study of digitalization training for teachers and parents on the benefits of parenting applications to prevent addiction programs in adolescents. Because according to internet experts, several sites are indicated to contain harmful

⁷ Nur Ainiyah, "Remaja Millenial Dan Media Sosial: Media Sosial Sebagai Media Informasi Pendidikan Bagi Remaja Millenial," *Jurnal Pendidikan Islam Indonesia* 2, no. 2 (2018): 221–36, https://doi.org/10.35316/jpii.v2i2.76.

⁸ Tiyas Nur Haryani, "Pendampingan Kelompok Informasi Masyarakat Desa Sumberdodol Kabupaten Magetan Dalam Pengembangan Iklan Pariwisata Desa," *Jurnal Pengabdian Kepada Masyarakat* (2020).

⁹ Liliek Budiastuti Wiratmo, "Kompetensi Literasi Digital Orang Tua Dan Pola Pendampingan Pada Anak Dalam Pemanfaatan Media Digital," *Representamen* 6, no. 02 (2020), https://doi.org/10.30996/representamen.v6i02.4269.

¹⁰ Karina Ayu Ningtyas, "Hubungan Antara Pola Penggunaan Situs Jejaring Sosial Facebook Dengan Kerentanan Viktimisasi Cyber Harrasment Pada Anak" (Universitas Indonesia, 2012).

¹¹ Hestin Oktiani, Teguh Budi Raharjo, and Eka Yuda Gunawibawa, "Pelatihan Digital Parenting Melalui Pemanfaatan Aplikasi Parenting Tools Sebagai Upaya Pencegahan Media Addiction (Kecanduan Media) Pada Anak Dan Remaja," 2020.

content, where the hope is that this can provide limits for minors, teenagers, and older adults from accessing site content that is not appropriate for them.

The level of digital literacy of Mulism teenagers is already high based on the internet. The level of hypertext-based digital literacy is already high, adolescents have digital literacy levels based on the content of the elements they assess, and adolescents have digital knowledge-based levels as the basis for their assessment. They are still moderate. In line with that¹² thinks that student services are needed in the era of digital technology, which has been widely disseminated, but there are still many students who have not utilized all-digital facilities effectively and positively. The misuse of digital technology can hurt the personal and social lives of students in Islamic universities¹³ also support that literacy skills become the digital citizenship identity of a religious community and human group in the virtual world of participation and forming public opinion evaluations in Muslim countries. Thus, Islamic students' digital literacy skills must be fostered to build the character of a pious and pious Muslim ummah. The aspects of digital literacy among universities must encompass instruments and systems, information and data, sharing and creation, historical and cultural contexts¹⁴.

Digital literacy learning tools and methods may be developed both inside and outside the classroom by recognizing these safety elements and advantages¹⁵. This study has the main aim, particularly to find out the opinions of digital literacy students confronting the Industrial Revolution. On the other hand, to define student experiences in the industrial revolution with digital technology, additional problems will emerge, such as utilizing digital skills with the appropriate and balanced objectives. Next is to demonstrate students' expectations in growing digital literacy in the Industrial Revolution period in the appropriate manner to gain advantages in the academic

¹² Ronal Paul Sitompul, "Pelayanan Pemuda Di Era Teknologi Digital" 5, no. 1 (1369): 1–16.

¹³ Audrey Yue, Elmie Nekmat, and Annisa R. Beta, "Digital Literacy through Digital Citizenship: Online Civic Participation and Public Opinion Evaluation of Youth Minorities in Southeast Asia," *Media and Communication* 7, no. 2 Critical Perspectives (2019): 100–114, https://doi.org/10.17645/mac.v7i2.1899.

¹⁴ Jeremy Riel and Sonya Christian, "Charting Digital Literacy: A Framework for Information Technology and Digital Skills Education in the Community College," *SSRN Electronic Journal*, no. March (2016), https://doi.org/10.2139/ssrn.2781161.

¹⁵ Garry Falloon, "From Digital Literacy to Digital Competence: The Teacher Digital Competency (TDC) Framework," *Educational Technology Research and Development*, 2020, https://doi.org/10.1007/s11423-020-09767-4.

environment¹⁶.The availability of the internet with a plethora of knowledge from all disciplines broadens students' perspectives. By using the internet, kids may acquire new views. Access to a variety of necessary information, especially in the field of study, helps students understand things more easily. The aspects of digital literacy among universities must encompass instruments and systems, information and data, sharing and creation, historical and cultural contexts¹⁷.

This research may subsequently contribute to giving students and particularly instructors with descriptive quantitative information on their digital literacy in the light of the Industrial Revolution 4.0.¹⁸ This study will also include contributing to an understanding of the significance of utilizing digital literacy to address the industrial revolution 4.0 in education in the higher education community, in particular universities. Empirical and social research should serve as a foundation. Higher education outputs are thus qualified and equipped to confront challenges in a time of increasing social life for people ¹⁹.

Digital literacy relates to all young and old, in urban and rural areas requiring information and guidance. Because technology does come something that is not learned but still comes, students as an easy Islamic generation require adequate provision with awareness of the benefits and uses of digital; nothing less and not too much, but an ideal and balanced internet literacy. In Indonesia, since not all groups grasp it completely, the word is still relatively new. Literature encompasses the capacity to read, comprehend and enjoy many kinds of communication, including speaking, printing, media, and fair and intelligent digital and digital media.

¹⁶ S Lestari and A Santoso, "The Roles of Digital Literacy, Technology Literacy, and Human Literacy to Encourage Work Readiness of Accounting Education Students in the Fourth Industrial Revolution Era," *KnE Social Sciences* 3, no. 11 (2019): 513, https://doi.org/10.18502/kss.v3i11.4031.

¹⁷ Riel and Christian, "Charting Digital Literacy: A Framework for Information Technology and Digital Skills Education in the Community College."

¹⁸ Ida Farida et al., "The Implementation of E-Government in the Industrial Revolution Era 4.0 in Indonesia," *International Journal of Progressive Sciences and Technologies (IJPSAT* 22, no. 2 (2020): 340–46, http://ijpsat.ijsht-journals.org.

¹⁹ National Research Council, "Developing Transferable Knowlwdgw and Skill in the 21st Century," no. July (2012): 1–4, https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_070895.pdf; James W. Pellegrino and Margaret L. Hilton, *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century, Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century*, 2013, https://doi.org/10.17226/13398.

This awareness and briefing are essential since students are also people who need excellent knowledge and equilibrium. At least the internet is the main foundation in obtaining formal knowledge. The 21st century is marked by digitalization in various aspects of life, including education.

Students with information literacy in the 21st century should acknowledge the need for information, frame information needs-based inquiries, and establish research methods. Therefore, students from Islamic colleges have specific rules in terms of guides, which are necessary to improve the quality of learning, which, as a fundamental pillar of Islamic students, cannot be divorced from God because students are increasingly demanding quick and effective access to information, critical evaluation of information and suitable and proper use of knowledge according to Sharia rules and the Islamic culture ²⁰. A new study shows that media literacy is necessary to participate in the new world about social issues, including games, performances, simulations, multitasking, cognition, collective intelligence, judgment, transmedia navigation, networking, and negotiation. However, because the target is Islamic university students, Islamic components and content also require an equally important concern with the digital core itself ²¹.

In addition to the factors of digital recipients and users, the media and other information providers play a central role in the success of the continuity and development of information and communication in the university environment. Digital technology is increasing as more students turn to the internet than any other source of information and support when facing problems with their learning, life, family, and community²². Digital technology is the main feature and implication of changing the

²⁰ Ika Yunia Fauzia, "Enhancing the Literacy of Shariah Financial Technology for Generation X, Y and Z in Indonesia," *Jurnal Minds: Manajemen Ide Dan Inspirasi* 7, no. 2 (2020): 65, https://doi.org/10.24252/minds.v7i2.15871.

²¹ M. Mazharul Islam and Mohammad Shahed Masud, "Determinants of Frequency and Contents of Antenatal Care Visits in Bangladesh: Assessing the Extent of Compliance with the WHO Recommendations," *PLoS ONE* 13, no. 9 (2018): 1–22, https://doi.org/10.1371/journal.pone.0204752.

²² Yoram Eshet, "Thinking in the Digital Era : A Revised Model for Digital Literacy," *Issues in Informing Science and Information Technology* 9 (2012): 267–76, https://doi.org/10.1089=cpb.2008.0264.

21st-century learning paradigm where its effectiveness and excellence have been proven to help the university community significantly²³.

Through technology, learning is more process-oriented than content-oriented. Learning in the digital age also allows teachers to equip students with the cognitive skills needed for the information age. These skills are essential for handling large amounts of information, such as problem-solving, thinking, critical thinking, creativity, self-study strategies, meta-coding, and reasoning. Digital literacy involves additional abilities, as well as reading and writing²⁴. Muslim university students must be able to evaluate and create media to help them study. They must be able to assess, analyze, and utilize information efficiently and effectively and use and manage information and apply an intelligent and positive knowledge of ethical and legal problems with access to and use of information ²⁵.

This research aims to analyze the digital literature trend among Islamic students in Indonesia via the identification of unique digital literacy capabilities among Islamic university students in the age of industrial revolution 4.0. Based on the description mentioned above. This is because students are a science community group that should influence the broader community of digital literacy users. In addition, students' ability to understand digital literacy also affects student competence in meeting the demands and changing times throughout the industrial revolution 4.0. Research on the concept of Islamic digital student literacy towards piety, especially those that refer to the principle of using positive digital literacy, is unprecedented mainly in its knowledge of how to do digital wisely and adequately. The study of digital literacy is no exception among young people who are in college. However, those in Islamic schools are like modern Islamic boarding schools in the context of the industrial revolution among students,

²³ Zaheer Hussain and Halley M. Pontes, "Personality, Internet Addiction, and Other Technological Addictions," vol. 2018 (Pennsilvania: IGI Global, 2019), 46–72, https://doi.org/10.4018/978-1-5225-8449-0.ch003.

²⁴ Zuhal Hussein, "Leading to Intention: The Role of Attitude in Relation to Technology Acceptance Model in E-Learning," *Procedia Computer Science* 105, no. December 2016 (2017): 159–64, https://doi.org/10.1016/j.procs.2017.01.196.

²⁵ Charles Kivunja, "Innovative Methodologies for 21 St Century Learning, Teaching and Assessment: A Convenience Sampling Investigation into the Use of Social Media Technologies Innovative Methodologies for 21 St Century Learning, Teaching and Assessment: A Convenience Sa," no. January (2015), https://doi.org/10.5430/ijhe.v4n2p1.

such as research ²⁶ on digital literacy among young people who are educated and cheerful, wise, and intelligent.

B. Method

A study to understand positive digital literacy trends among Islamic university students is the purpose of this study. For this purpose, we have successfully reviewed several papers published in high-impact journals. So that the data we find is new, we target the publications of 10 years ago (2010-2021). We continue with the analysis process involving a data coding system, data evaluation, and in-depth data interpretation²⁷. So that the results of the data analysis are valid, we connect them with the study questions before we conclude. As for the data search process, we use keywords such as "Digital Literacy", "Islamic University Students", "Digital Trends" and "Digital Among Students". Because this is an analytical study, we are working on a descriptive qualitative design to guide the study of digital literacy literature at the Islamic university level.²⁸

C. Result and discussion

In this results section, we present specific findings from a study of several publisher papers discussing the role and use of digital literacy among Islamic students.²⁹ found wonder and mechanical behavior among adolescents in schools through a survey of cultural writing, innovation, humanism, teaching, and sociolinguistics. The emphasis of this examination follows the perspective of difficulties and opportunities to prepare for an Islamic era that is gifted in knowledge and piety with digitalization. The pattern of advanced training in digital technology has influenced the improvement of

²⁶ Shifiatus Saadah, "LeKemampuan New Media Literacy Remaja Dalam Mengenali Cyber Sexual Harassment Di Surabaya New Media Literacy Skills AmongMedia M Adolescent in Recognizing Cyber Sexual Harassment in Surabaya" 11, no. 2 (2020): 69–124.

²⁷ Erik Blair, "A Reflexive Exploration of Two Qualitative Data Coding Techniques," *Journal* of Methods and Measurement in the Social Sciences 6, no. 1 (2015): 14–29, https://doi.org/10.2458/v6i1.18772.

²⁸ Maria Spante et al., "Digital Competence and Digital Literacy in Higher Education Research: Systematic Review of Concept Use," *Cogent Education* (Taylor and Francis Ltd., January 1, 2018), https://doi.org/10.1080/2331186X.2018.1519143.

²⁹ Amat Suroso, "Challenges and Opportunities towards Islamic Cultured Generation : Socio-Cultural Analysis" 5, no. March (2021): 180–94.

computer skills at school age wisely and adequately under the course and control of instructive objectives. At the end of this study, we can understand that the introduction from the beginning on how to use digitalization technology must continue so that later generations of Islamic students can understand and apply the internet positively and with self-discipline 30

The utilization of digital literature by Dhaka University Faculty of Arts students analyzed current trends ³¹. The essence of this study is to find out the latest in the use of computerized literacy by students of the Faculty of Arts, Dhaka University. A total of 200 surveys were distributed among students, and 180 surveys were returned. The respondents were male, and most of them lived in the campus lobby. They are very concerned about digital literacy skills at a high level, and they use them for college work successfully and adequately find the use of digital literacy in their research college work. The essence of this finding is that their findings show that all students benefit from digital literacy positively because they have gained understanding and applicability from universities³².

Rafi et al. ³³ successfully examine how to coordinate digitalization innovations for student data and teach advanced information technology skills in scientific libraries. Papers are significant to understand students' technical abilities in utilizing digital data assets and searching online data. Scientific libraries associated with high-level innovations further develop students' computerized educational level and mechanical digital skills. It is also reasonable that the innovative inclusion of libraries further develops students' innovation-based literacy skills. The results can assist library executives in providing a long-term methodology for using digital technology to further develop advanced literacy proficiency instruction. The study of providing

³⁰ Amana Raquib, Omar Javaid, and Gulnaz Anjum, "Creation of the Islamic Self for Sustainability: Can Muslim Entrepreneu -Rship Positively Contribute to the SDGs through Tazkiya and Tarbiya of the Muslim Youth," *Journal of Islamic Business and Management (JIBM)* 10, no. 02 (2020): 323–42, https://doi.org/10.26501/jibm/2020.1002-003.

³¹ Md.Emdadul Islam; and Md.Saiful Alam, "Use of Digital Literature by the Students of Faculty of Arts of University of Dhaka: A Current Trend Analysis Md." 10, no. 1 (2021): 6.

³² Joseph E Aoun, "Optimism and Anxiety: Views on the Impact of Artificial Intelligence and Higher Education's Response," *Gallup Inc.*, vol. January, 2018.

³³ Muhammad Rafi, Zheng JianMing, and Khurshid Ahmad, "Technology Integration for Students' Information and Digital Literacy Education in Academic Libraries," *Information Discovery and Delivery* 47, no. 4 (November 18, 2019): 203–17, https://doi.org/10.1108/IDD-07-2019-0049.

understanding and application of digital technology to Islamic university students was also carried out by Pollizzi³⁴.

Rafi et al. successfully examine how to coordinate digitalization innovations for student data and teach advanced information technology skills in scientific libraries. Papers are significant to understand students' technical abilities in utilizing digital data assets and searching online data. Scientific libraries associated with high-level innovations further develop students' computerized educational level and mechanical digital skills. It is also reasonable that the innovative inclusion of libraries further develops students' innovation-based literacy skills. The results can assist library executives in providing a long-term methodology for using digital technology to develop advanced literacy proficiency instruction further. The study of providing understanding and application of digital technology to Islamic university students was also carried out by Izni (2019) to study digital literacy skills needed by students to research hoax news or content on online media.

Virtual deradicalization through strengthening digital literacy in Islamic school students illustrates how important it is to ³⁵. This study confirms that Islamic student's schools must be creative in introducing substances that convey material about the goodness of Islam and play a significant role in de-radicalizing online activities. The students must be the center of users in many learning contests through online media. They must be given digital application devices and hardware in digitizing innovations for the advancement of their education. Here we can understand that it is essential for Islamic school students to understand digital literacy correctly³⁶.

Subsequent findings by Anthonysamy³⁷ examine self-managed learning techniques in higher education by cultivating digital application skills for deep-rooted learning that can be maintained until they graduate. This paper intends to analyze how independent learning techniques can foster increased literacy skills in student learning.

³⁴ Gianfranco Polizzi, "Digital Literacy and the National Curriculum for England: Learning from How the Experts Engage with and Evaluate Online Content," *Computers & Education*, 2020, 103859, https://doi.org/10.1016/j.compedu.2020.103859.

³⁵ Isnawati Muhammad Yusuf, "Online Deradicalization through Strengthening Digital Literacy for Santri" 24, no. 1 (2021): 83–98.

³⁶ Anwar Hafidzi, "The Ability of Islamic Boarding School Students In," *International Journal Of Graduate Of Islamic Education* 1, no. 2 (2020): 141–53.

³⁷ Lilian Anthonysamy, Ah Choo Koo, and Soon Hin Hew, "Self-Regulated Learning Strategies in Higher Education: Fostering Digital Literacy for Sustainable Lifelong Learning," *Education and Information Technologies* 25, no. 4 (2020): 2393–2414, https://doi.org/10.1007/s10639-020-10201-8.

This study will be helpful for instructors and students to make rules about the best methods to use digital literacy rock learning to improve further education. Three of the four supported speculations support that the three digital literacy spaces significantly positively affect college-level metacognitive information, executive assets, and persuasive beliefs with virtual activities ³⁸

Iqbal al. ³⁹ have shown that adolescents are essentially able to help Muslim females with school research at the educational level of digital technology skills. In these experimental tests, 45 young Muslim women and adults between the ages of 13 and 19 were involved in three British Muslim schools. Semi-organized meetings have been utilized to collect information, and material has been analyzed via format research, framework controls, and case study. Students aim to assist their learning and success in learning and digital literacy, although their contribution and usage to promote innovation are divided. The core of this research is that Muslim youth education schools must be taught computer literacy, enabling them to utilize it for education. Similar research has also been discovered at Muslim Universities in India ⁴⁰

López-Meneses et.al ⁴¹ also pointed out that the students' superior skills in the DigCom 2.1 model are present in a comparable study at three European institutions. The computer expertise of 1,073 students at two Italian and two Spanish institutions has been further investigated. It includes data and information, communication, collaborative effort, and the automated production of content. Results show that future students will have high-level transitional know-how in data and additional training but automated content production at the lower intermediate levels. Likewise, Durriyah and Zuhdi's ⁴² findings prove computerized proficiency with EFL student educators by

³⁸ Bruce J. Avolio et al., "E-Leadership: Re-Examining Transformations in Leadership Source and Transmission," *Leadership Quarterly* 25, no. 1 (2014): 105–31, https://doi.org/10.1016/j.leaqua.2013.11.003.

³⁹ Javed Iqbal et al., "The Face of Digital Literacy for Muslim Teenage Girls: A Comparative Study of Bradford Muslim Girl Schools," *International Journal of Inclusive Education* 18, no. 12 (2014): 1283–1303, https://doi.org/10.1080/13603116.2014.895430.

⁴⁰ Farida Khan and Rehana Ghadially, "Empowerment through ICT Education, Access and Use: A Gender Analysis of Muslim Youth in India," *Journal of International Development* 5, no. 10–13 (22AD): 659–73, https://doi.org/10.1002/jid.

⁴¹ Eloy López-Meneses et al., "University Students' Digital Competence in Three Areas of the DigCom 2.1 Model: A Comparative Study at Three European Universities," *Australasian Journal of Educational Technology* 36, no. 3 (2020): 69–88, https://doi.org/10.14742/AJET.5583.

⁴² Tati Lathipatud Durriyah and Muhammad Zuhdi, "Digital Literacy With EFL Student Teachers: Exploring Indonesian Student Teachers' Initial Perception About Integrating Digital

exploring the basic understanding of Indonesian student instructors about incorporating advanced innovation into educational units. Research tracks that many student teachers are dynamic clients of computer advancements, but they are hesitant to use them for teaching purposes. Efforts to plan replacement instructors for incorporating innovations are urgently needed. This article discusses a classroom research project that investigates the basic understanding of Indonesian student instructors about leveraging advanced advances for EFL education. Notable computerized innovations to choose from include Facebook, web journals, Skype, and WhatsApp⁴³

The use of digital literacy as a learning tool for aspiring Indonesian teachers was shown by Rusydiyah et al. ⁴⁴. In the face of a rise in non-linear radicalization material, their research aims to distinguish student-teacher advanced skills by conducting a study on colleges based on study requirements.

Tabayyun's ideas are an essential justification for the extraordinary results. This shows that the individual computerized educational capacity of teacher candidates is included in a very definite classification (excellent) with a summary of the average score of 3.55 and the side effect of the central meeting conversation.

Finally, we present Mubarok's (2019, November) findings, which examine digital family literacy for character building in primary education. In the proceedings of an international conference on Islamic education, he encountered challenges in technology and literacy for families. Teaching children in families is evidence of advanced skills that can be communicated from guardians to children, especially under 12 years of age. The motivations behind this investigation were a) basic ideas about computerization skills and b) family advanced proficiency examinations for working characters in primary schools. The sources of information in this article are diaries and books that identify computerized family literacy on character building. The results of this study are very relevant to the government's demand that the continuity of conscious education must begin in the home environment (Rickes, 2016).

Technologies Into a Teaching Unit," *International Journal of Education and Literacy Studies* 6, no. 3 (2018): 53, https://doi.org/10.7575/aiac.ijels.v.6n.3p.53.

⁴³ David Andreas Silvetre Pozo, "Mobile Application to Enhance Writing Skills for Tenth Graders of Unidad Educativa Alfa y Omega, La Libertad, Province of Santa Elena, the School Year 2018-2019.," 2019.

⁴⁴ Evi Fatimatur Rusydiyah, Eni Purwati, and Ardhi Prabowo, "How to Use Digital Literacy as a Learning Resource for Teacher Candidates in Indonesia," *Cakrawala Pendidikan* 39, no. 2 (2020): 305–18, https://doi.org/10.21831/cp.v39i2.30551.

C. Conclusion

We will close this final section with the conclusion of our study to understand trends in digital literacy among Islamic university students through an in-depth study of several publications on communication technology. We believe our explanation has answered the purpose of this study where we found that the digital trend among students and Islamic school students is a positive literacy trend where they have been understood about the ways and uses of technology, especially in literacy that they need in college and when they face the world of work. From the evidence, field evidence shows that the literacy trend among students is wise in using it. However, the university still has to understand all students about these skills to successfully understand and apply their digital skills to positive learning and life goals so that the presence of technology still brings benefits and welfare to students.

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