

HOW AUTHORS MANAGE THE QUALITY OF RESEARCH AND PUBLISHED MANUSCRIPTS USING DIGITAL APPLICATIONS (EVIDENCE ANALYSIS OF INTERNATIONAL STUDIES)

Gunawan Widjaja¹, Novi Puji Lestari², Vani Wirawan³, Fachrurazi,⁴ Ita Nurcholifah,⁵

¹ Universitas Krisnadwipayana, Indonesia

email: widjaja_gunawan@yahoo.com

² Universitas Muhammadiyah Malang, Indonesia

Corresponding author email: novilestari@umm.ac.id

³ Universitas Diponegoro, Indonesia

email: vaniwirawan@gmail.com

⁴ Institut Agama Islam Negeri Pontianak, Indonesia

email: ferry.7co@gmail.com

⁵ Institut Agama Islam Negeri Pontianak, Indonesia

nurcholifahhery@gmail.com

Abstrak

Bagaimana penulis mengelola karya studi yang berkualitas dan manuskrip yang diterbitkan menggunakan aplikasi digital melalui pencarian dan analisis data dari beberapa publikasi berdampak tinggi di bidang tinjauan literatur teknologi digital telah menjadi tujuan utama dari penelitian ini. Karena kami percaya bahwa keberhasilan pekerjaan penelitian sangat erat kaitannya dengan penggunaan fasilitas teknologi digital mengingat di era sekarang ini, semua kemudahan pekerjaan ada dalam aplikasi alat digital, untuk itu kami melakukan pencarian data terlebih dahulu secara online. Data berdasarkan beberapa publikasi jurnal terkenal seperti database Researchgate, Elsevier, Google Books, dan sage pub. Kami telah melihat semuanya dengan memasukkan penilaian informasi, pemahaman informasi, dan penarikan akhir informasi tergantung pada tujuan untuk menanggapi pertanyaan pemeriksaan ini dengan legitimasi dan kepastian. Mengingat efek samping dari informasi dan percakapan, kami dapat meringkas hasilnya, antara lain, dengan menggabungkan inovasi ke dalam karya penelitian; kesalahan manusia berkurang sementara interaksi eksplorasi dipercepat. Kemajuan berbasis cloud mulai mengubah cara skolastik mengumpulkan informasi beberapa tahun setelahnya. Perkembangan teknologi pada karya tulis dan publikasi mencerminkan kebutuhan yang berkembang untuk penerimaan cepat ke informasi yang lebih maju. Idealnya, penemuan kajian ini akan menambah peningkatan ilmu pengetahuan dan inovasi khususnya karya tulis.

Kata Kunci: *Teknologi Digital, Karya Tulis, Pekerjaan Riset, Inovasi Publikasi, dan Telaah Publikasi.*

Abstract

How writers manage quality study work and manuscripts published using digital applications through searching and analyzing data from several high-impact publications in the field of digital technology literature review has become the primary goal of this study. Because we believe that the success of research work is very closely related to the use of digital technology facilities considering that in the current era, all ease of work is in the application of digital tools, for this, we first conducted a data search using online data based on several well-known journal publications such as the Researchgate database, Elsevier, Google Books, and sage pub. We have looked into everything by including information assessment, information understanding, and information end drawing dependent on the goal to respond to this examination question with legitimacy and certainty. Given the aftereffects of the information and conversation, we can close the outcomes, among others, by fusing innovation into research work; the danger of human errors was diminished while the exploration interaction was sped up. Cloud-based advances started to change the way scholastics gather information numerous many years after the fact. Our development mirrors the developing requirement for fast admittance to great information. Ideally, these discoveries add to the improvement of science and innovation.

Keywords: Digital Technology, Research Work, Quality of Study, and Publication Review.

INTRODUCTION

According to the current guidelines of higher education, the main tasks of an academician are divided into three areas: the learning and teaching process, carrying out research, and doing community service. (Istambul, 2019; Hendriarto et al., 2021; Suroso et al., 2021). The work is neatly wrapped up in the Tridharma of Higher Education which has become a reference for universities worldwide. That is, the task of an academic is not only teaching but also guiding students. Lecturers must also conduct research and community service. Unfortunately, the latter two are still often viewed as side jobs. Frank Donoghue, *The Last Professors* (Fordham University Press, 2018).. A professor is more concerned with his regular teacher and student mentor responsibilities than developing fresh ideas through scientific writing. At the same time, the main task of professors and professors is to produce new knowledge, technology, and new solutions to various problems faced by multiple parties, including students, universities, and the general public, through research and publication activities. So, because of how important and challenging it is to carry out research, academics are often less active in the research aspect. Herbert W. Marsh and Andrew J. Martin, 'Academic Self-Concept and Academic Achievement: Relations and Causal Ordering', *British Journal of Educational Psychology* 81, no. 1 (2011): 59–77..

When a student is no longer in school, he becomes a college student and has the word 'maha' before his name. Paul Thomas, 'The Creation-Evolution Debate: An Islamic Perspective' (PhD Thesis, King's College London (University of London), 2012)..

That means he should criticize what he already knows as passive recipients of knowledge and as participants in the learning process. As a result, it is critical to back up current course content with relevant research findings. As a result, a lecturer can create content taught to students through research activities—using recent and relevant research findings. A student's perception and common sense will be honed as well. This can help them become more inventive and creative in dealing with future developmental difficulties. Okan Sarigoz, 'Assessment of the High School Students' Critical Thinking Skills', *Procedia-Social and Behavioral Sciences* 46 (2012): 5315–19.. In the general public's view, higher education is a mecca of information—the epicenter of various disciplines and various talents. The university has a moral obligation to help improve people's lives in its community by contributing its thoughts and expertise. A solution or innovation can be developed through research efforts on different community issues that can offer immediate benefits to the surrounding community. In other words, through research efforts, academics can help institutions fund community service and initiatives so that the community gets the progress made by campus intellectuals in the form of new findings through current studies. Audrey L. Begun et al., 'Developing Effective Social Work University—Community Research Collaborations', *Social Work* 55, no. 1 (2010): 54–62..

Hazelkorn, (2014) through his data, shows that many top universities are currently recognized worldwide for their qualitative research publications. Some of these names are examples of how the

university's research excellence has proven to help the institution improve its reputation. Ya-Wen Hou and W. James Jacob, 'What Contributes More to the Ranking of Higher Education Institutions? A Comparison of Three World University Rankings', *International Education Journal: Comparative Perspectives* 16, no. 4 (2017): 29–46.. The more research published by professors at a university, the more likely that institution's reputation will improve. When a researcher publishes in a different scientific publication, he will logically include the institution's name to which he belongs. As a result, the name of the college is increasingly known. In addition, many university rating organizations, such as QS World Ranking and Webometric, use productivity in this research area as a standard when ranking. So, it is undeniable that the university's reputation is closely related to the importance of the professors who have successfully carried out primary and contributed studies in society both within and outside the country. Vicente Safón, 'Inter-Ranking Reputational Effects: An Analysis of the Academic Ranking of World Universities (ARWU) and the Times Higher Education World University Rankings (THE) Reputational Relationship', *Scientometrics* 121, no. 2 (2019): 897–915..

Ideally, research enhancement has significance and prestige. Jonathan D. Linton, Robert Tierney, and Steven T. Walsh, 'Publish or Perish: How Are Research and Reputation Related?', *Serials Review* 37, no. 4 (2011): 244–57.. Today in Indonesia, researching at the university level is fraught with difficulties especially funding and mentoring. Often found, lecturers' decisions to concentrate on their responsibilities as student advisors rather than the other two jobs – particularly

research and publication assignments – are not without reason. Not only because of the problem of financing, which is often more than a risk that the lecturers cannot think about. Angelito Calma, 'Funding For Research and Research Training and Its Effects on Research Activity: The Case of the Philippines', *The Asia-Pacific Education Researcher* 19, no. 2 (2010): 213–28.. The issue of poorly structured research data management is also a standard stumbling block. The university-level study administration procedure became disorganized and complicated as a result of this situation. This situation, of course, harms the motivation of researchers by professors in many universities in Indonesia. On the other hand, reason has a significant influence in influencing the productivity of researchers and the quality of the scientific work they produce. As a result, the lecturers ended up being very passive and static with the latest study assignments. Bagyo Y. Moeliodihardjo et al., 'University, Industry, and Government Partnership: Its Present and Future Challenges in Indonesia', *Procedia-Social and Behavioral Sciences* 52 (2012): 307–16..

Research problems and issues in developing countries like Indonesia are pretty complicated. In addition to funding, there is also a research implementation system that seeks to realize research excellence in universities. However, because everything is limited, then to answer this question also requires intensive study and experiment. Because this issue is critical to raise the intention to improve the management of research data within the institution itself can be carried out. For example, a research information system capable of managing all university research administration and research cycle processes

in total. Of course, this will make research easier for human researchers in institutions. Universities must be able to cultivate a research-oriented culture in their academic community.

Consequently, it is hoped that higher education academics can produce higher-quality research findings that will benefit their institutions and the wider community. Both instructors and institutions rely heavily on scientific publications. Damianakis and Woodford, (2012) said that science could not develop without scientific publications. Scientific journals are significant in the advancement of science in today's sophisticated research era. Therefore, every academic community must play an active role in producing scientific publications. Aileen Fyfe et al., 'Untangling Academic Publishing: A History of the Relationship between Commercial Interests, Academic Prestige and the Circulation of Research', 2017..

According to Clandinin and Connelly, (2004) telling the twists and turns of scientific publications starts from the implementation of research. It is a fact of knowledge, and one is scientific ideas and contributing to the advancement of research. So that publication fulfills the promise of lecturer research funding and promotion criteria. Scientific discoveries or conclusions can be archived and protected through publication. Pratama, (2015) said evidence of competence, individual or institutional professionalism, and the ability to meet one of the criteria for the rank of lecturers, which will then be an evaluation of the accreditation of study programs or universities. He said the publication was beneficial for lecturers who would then evaluate the degree of certification of study programs and institutions. Accreditation and

publication are interrelated and will form a continuous cycle in the evaluation of study programs. Scientific research can also help a university achieve a reputation and ranking at the national and international levels. Ka Ho Mok and Anthony BL Cheung, 'Global Aspirations and Strategising for World-Class Status: New Form of Politics in Higher Education Governance in Hong Kong', *Journal of Higher Education Policy and Management* 33, no. 3 (2011): 231–51..

In addition to improving the quality of research, universities must also have entities that oversee research and create strategic and effective research programs. Setting standards and research processes related to increasing the number of scientific publications, discoveries in science and technology, and the quantity and quality of teaching materials are some examples. Universities must also maintain and improve the quality of research institutions or management functions in ongoing research programs, monitor and evaluate institutions in carrying out research programs, have research guidelines and criteria and use research facilities and infrastructure. John Øvretveit, 'Understanding the Conditions for Improvement: Research to Discover Which Context Influences Affect Improvement Success', *BMJ Quality & Safety* 20, no. Suppl 1 (2011): i18–23.. Regarding improving the quality of research, Shopova, (2014) said that technology and students' readiness to carry out research are also important variables to be studied. He also added that publishing is not only done alone or independently. But also a collaboration between lecturers, students, or between institutions or institutions. Researchers can work together to produce scientific work rather than doing it separately. For example, lecturers can collaborate in researching for

data purposes so that the quality of research can be continuously improved. Anna R. Gagliardi et al., 'How Can We Improve Guideline Use? A Conceptual Framework of Implementability', *Implementation Science* 6, no. 1 (2011): 1–11..

The rise of innovation as of late has changed exploration strategies in colleges and different circles of society. By fusing innovation into research establishments, the speed increase and minimization of human blunder can be decreased. Simultaneously, the exploration interaction itself is sped up and thriving. Cloud-based innovation started to change the way scholastics gather information many years after the fact. Triatmaja, (2019), as found in his investigation of the impact of artificial consciousness on the bookkeeping information research calls. This expansion reflects the growing need for fast access to high-quality data. This is the result of adapting to a new habit. For research institutions, the pandemic era limits researchers, so new methods need to be developed. There is no way humans would want to take the risk if there was a safer way. For example, digital research methods are a new strategy developed to collect, process, and visualize data. Ray M. Chang, Robert J. Kauffman, and YoungOk Kwon, 'Understanding the Paradigm Shift to Computational Social Science in the Presence of Big Data', *Decision Support Systems* 63 (2014): 67–80.. This makes it easier for researchers to collect primary and secondary data without meeting face to face. So that digital-based research techniques can become a new force in social and humanities research, especially in terms of displaying research results, research size, and intensification of research time. The end of all research activities will be greatly helped by using the internet and other digital technologies, such as online

surveys, text messages, and interactive voice response systems referred to as digitally mediated research techniques. Cornelia Reyes, 'Eliciting Data on Social Relationships: The Use of Hand-Drawn Network Maps in Tracing the Perception of Digitally Mediated Social Ties', *International Review of Social Research* 6, no. 4 (2016): 256–68..

Grimm et al., (2020) emphasize that the digital approach is not a substitute for field research but a complementary tool that cannot be ignored in dealing with societal changes in the era of the fourth industrial revolution. Utami et al., (2019) wrote that research could not be separated from philosophy and ethics, both in the study of social data and especially in the health sector. This is important because research ethics to maintain scientific relevance and data validation is one of the elements emphasized in improving digital techniques in creating digital infrastructure. Berliana, (2020) said digital strategies do not mean abandoning traditional methods with a solid scientific reputation. However, the creation of this technique helps complement current methods, especially as one of the best options amid the COVID-19 epidemic. Without the mobility of researchers to items, the digital approach is also relatively time-efficient. He also said that one of the benefits of digital research techniques is to reduce the barriers of space, time, and distance between researchers and the object of study, thus enabling them to approach the situation as if they were in direct contact. (Sarbani and Subandoro, 2018; Manullang et al., 2021; SUDARMO et al., 2021; Aslan et al., 2020; Putra et al., 2020).

Digital research method

Ida, (2018) adds that the basic concept of the digital method is a data collection approach that changes direct face-to-face

interaction into non-face-to-face information technology based on internet networks using communication platforms such as computers. Furthermore, the data is processed automatically with the programming language as the outside. Solikin and Amalia, (2019) said that the digital research engineering model is divided into three layers: First, a model based on an all-digital database that starts with data collection, processing, and visualization. Second, non-digital databases, but digital collection, processing, and visualization; Third, non-digital data, digital data collection, and digital or non-digital data processing. Setiawan, (2012) supports those online surveys support practical research activities in the world of academic studies. It uses software with online surveys with a web platform.

Furthermore, Fujiawati and Raharja, (2019) stated that there are two methods of collecting data using an ethnographic approach; prioritize participatory observation; platform-specific research characteristics; pay attention to the ethics of data collection; using the platform under consideration; off-platform data storage. Likewise, in the study of in-depth interviews with particular emphasis on the length of the interview, mental and personal elements, talk about what researchers do online. Mudjia Rahardjo, 'Metode Pengumpulan Data Penelitian Kualitatif', 2011.. Furthermore, what techniques are used to collect quantitative data are data from questionnaires, scheduled interviews, tests, planned observations, inventories, rating scales, and regular measurements are some of the most frequently used data collection methods in quantitative data collection. Tutik Rachmawati, 'Metode Pengumpulan

Data Dalam Penelitian Kualitatif', *UNPAR Press. Bandung*, 2017..

Based on the understanding supported by evidence from previous studies, we would like to add a deeper understanding of how researching data collection to writing study reports with the involvement, convenience, and advantages of digital technology. Finally, the author believes that managing studies with research quality and published manuscripts uses digital applications from evidence and analysis of international journals. Rebecca Jesson et al., 'Improving Achievement Using Digital Pedagogy: Impact of a Research Practice Partnership in New Zealand', *Journal of Research on Technology in Education* 50, no. 3 (2018): 183–99..

METHOD

We understand once again that the core purpose of this study is to obtain evidence to what extent digital technology has helped researchers in the publishing world through a review of dozens of scientific journals. So, we found literature data through the Google search engine, especially on data based on the results of well-known publications such as Elsevier publications, Google Books, Taylor France, and Sagepub. Gwo-Jen Hwang and Po-Han Wu, 'Advancements and Trends in Digital Game-Based Learning Research: A Review of Publications in Selected Journals from 2001 to 2010', *British Journal of Educational Technology* 43, no. 1 (2012): E6–10.. Furthermore, our analytical efforts are carried out with a data coding system, critical level evaluation. Finally, we draw conclusions that answer the study questions with high validity and reliability principles. After analyzing our data, we design the report into a manuscript article under a qualitative descriptive design. This

study is very dependent on secondary data because we aim to review the results of previous studies on various high-impact data-based ones. Zainuddin Muda Monggilo, 'Kajian Literatur Tentang Tipologi Perilaku Berinternet Generasi Muda Indonesia', 2016..

RESULT AND DISCUSSION

Research conducted in the digital age

The internet and other digital technologies have changed the way people live and work, including conducting research. Andri Lesmana Suryana, R. Reza El Akbar, and Nur Widiyasono, 'Investigasi Email Spoofing Dengan Metode Digital Forensics Research Workshop (DFRWS)', *Jurnal Edukasi Dan Penelitian Informatika (JEPIN) Vol 2*, no. 2 (2016).. For example, researchers can collect data from respondents in other parts of the world using the internet. Even on a broad scale, online surveys can collect and present summary data. Another convenience is that interviews are recorded using the smart device's recording function. Geographic Information System software has been widely used to collect, present, and analyze spatial and geographic data. Andree Ekadinata et al., 'Sistem Informasi Geografis Untuk Pengelolaan Bentang Lahan Berbasis Sumber Daya Alam', *Bogor, Yudhistira*, 2008.. Thanks to modern technology, research operations have advanced significantly from manual to digital. The quality of administration, processing, and analysis of digital data makes it easier for researchers, and achieving research goals automatically becomes more practical. Another advantage with digital devices, researchers can store data that is much information. There are even cloud storage options accessible nowadays. The availability of different tools

facilitates the analysis of research findings, both in terms of coding and statistical calculations. Processing and analyzing results is also more accurate than manual processing. The amount of time it takes to process data is also drastically reduced. Research findings can be quickly communicated through various online conferences. All of these are the conveniences and advantages that have been found since digital technology is present in all businesses and jobs. Suryana, El Akbar, and Widiyasono, 'Investigasi Email Spoofing Dengan Metode Digital Forensics Research Workshop (DFRWS)'..

For means of communication via the internet that allows researchers from various countries to collaborate. Those from different universities can collaborate using video conferencing tools like Skype and Whatsapp video calls. Using Google Docs or Evernote's sharing functions, researchers can work on the same document in groups. The collaboration of scientists from various regions or nations is no longer limited by space and time. Various research institutes have also established multidisciplinary and interdisciplinary research. With this technology, research and development of materials science by gathering experts from multiple fields such as physics, chemistry, biology, engineering, and the environment become easier. For example, scientists from various fields, such as communication, media studies, educational psychology, and instructional technology, collaborate on collaborative research on communication and learning.

In industry 4.0 and contemporary society, research institutions like this continue to develop and provide more in-depth studies analyzing common problems. The point is that the study of various

midwives and far apart has opened up more obstacles to being productive since the digital era has increasingly entered all fields. (Pakpahan and Fitriani, 2020; Putra et al., 2020; Putra and Aslan, 2020). It is important to note that this transition does not alter the fundamental nature of research operations. Research is still an effort to answer a riddle regarding a subject or problem. Research should continue to be conducted in an organized manner to gather and evaluate data to comprehend the research topics better. However, different new techniques and the use of new technology are required to accomplish this objective.

New Approach

Due to the internet and digital technology, interviews can be conducted in writing or via video conferencing. Playing back video footage allows for thorough observation of the scene and study participants. Trena Paulus, Jessica Lester, and Paul Dempster, *Digital Tools for Qualitative Research* (Sage, 2013).. Online data-sharing technologies, such as screenshots and digital data collection, can also collect artifacts. This is a positive development as it simplifies the researcher's work. So, with respondents making observations and collecting artifacts such as photos, films, and documents, this is a standard method for obtaining information in qualitative research. Uma D. Parameswaran, Jade L. Ozawa-Kirk, and Gwen Latendresse, 'To Live (Code) or to Not: A New Method for Coding in Qualitative Research', *Qualitative Social Work* 19, no. 4 (2020): 630–44..

Other types of studies are also becoming more popular. Grounded theory, phenomenology, ethnography, narrative analysis, and case studies are no longer the only types of studies available. Digital

ethnography, self-study of teaching practice, and multimodal analysis are words that may be encountered today. The development of different digital gadgets has changed the way people live and social relations between humans and human interactions mediated by technology, so there is this new approach. Suzana Suzana et al., 'Gadget and the Internet for Early Childhood Distance Learning', *PalArch's Journal of Archaeology of Egypt/Egyptology* 17, no. 7 (2020): 8019–28.. Digital ethnography uses an anthropological research approach to collect data from various online groups. Whatsapp Groups and Online Discussion Forums are two examples of online communities. The relationship between netizens mediated through gadgets and online platforms has become the subject of digital ethnography studies. Elisenda Ardèvol and Edgar Gómez-Cruz, 'Digital Ethnography and Media Practices', *The International Encyclopedia of Media Studies* 7 (2014): 498–518..

The advantages of advanced devices were additionally explored by Baker and Lastrapes, (2019) which prevailed regarding looking at instructor curator joint effort on the composing execution of primary younger students utilizing computerized composing programs. The findings and proposals of the investigation of composing encounters of primary younger students utilizing computerized composing applications contrasted the aftereffects of a general overview of composing learning strategies. This examination tracked down that computerized composing applications expanded the amount and nature of understudies' composition, charmed and urged kids to compose, stretched out investigation days to invest more energy on paper, and aided understudies from different foundations.

Then, Williams and Beam, (2019) analyze organizations having some expertise in advanced instruments. Audit of exploration on innovation and composing. Understudies' preparing and compositional capacities are helped by innovation intervention instructing. Understudies are more propelled to take part in figuring out how to compose because of utilizing advanced innovation. Social contact and friend collaboration expanded because of the utilization of advanced writing material. The utilization of innovation is mainly supported among hesitant and battling authors. The coordination of innovation into the composing educational plan is an issue for educators. The utilization of PCs and other data and correspondence advances during composing guidance and related composing exercises was explored in this examination. Understudies' compositional cycles and composing abilities work on because of innovation intervened composing guidance, as does their agreement and utilization of new education. The expert improvement of educators in the utilization of applicable and excellent academic innovation is direly required. Belias Dimitrios et al., 'Traditional Teaching Methods vs. Teaching through the Application of Information and Communication Technologies in the Accounting Field: Quo Vadis?', *European Scientific Journal* 9, no. 28 (2013)..

Leijten et al., (2013) reviewed the benefits of digital in the workplace. Working on papers from various digital sources in the digital age is no longer a problem. Professional communication in today's workplace often involves gathering documents from several digital sources. Over several days, this work follows a professional communications designer as he

develops a proposal. We use keyboards and interview data to map out the professional's whole process, show the temporal cycle of his writing/design and demonstrate how he changes and reuses the work of others. Hansen is an essayist from Laakso et al., (2019) looking at how the impact of computerized innovation on the exploration composing measure is researched for a situation investigation of synergistic writing in software engineering. The reason for this article is to see contextual investigations of shared examination writing in software engineering. It centers around scholastics' utilization of advanced composition and web-based media advances. The data was surveyed against the nearby practice, and the article was created as a component of the creative cycle of the writers' multicultural examination bunch. The outcomes show how synergistic composing frameworks that empower new practices, for example, coordinated composing, may not be utilized in the manner their makers expected. Danielle Cadieux Bolden, June W. Hurt, and Mary Kathleen Richardson, 'Implementing Digital Tools to Support Student Questioning Abilities: A Collaborative Action Research Report.', *Ie: Inquiry in Education* 9, no. 1 (2017): 2..

Furthermore, Paltridge, (2020) study, which examines how characters in research can be designed and possible in the digital era, where the author can publish academic works, is a challenge in itself. The use of digital technology has revolutionized the writing of academic journals and the distribution and preservation of academic work. It includes storing and distributing academic work, using a citation management system, and exchanging research materials after articles are approved for publication. Researchers also introduce how digital

technologies, such as plagiarism detection tools, are used to evaluate journal papers. The growth of open access journals and the emergence of predatory publishers are discussed and issues in an online publication.

Furthermore, Laquintano, (2010) through studies with digital, self-publishing, and E-books, are examples of long-term writing. Through digital assistance, he uses data from digital ethnography. His further research investigated writing, authorship, and self-publishing in the online marketplace. His study focuses on literary methods that allow online players to create, distribute, and approve 13 self-published publications. Essays support the idea of authorship as a constant interaction between writer and reader. Supriyadi et al., (2020) raised efforts to improve the quality of writing and academic publications by increasing students' technological literacy; as many as 63 students from one of the universities in Sumedang Regency were involved in this study, consisting of 23 female students and 40 male students. The results showed that the students' writing deficiencies were originality, lack of representative and reliable sources, and inconsistency between in-text citations and reference lists. The number of student publications increased by 84.12% as a result of these measures.

Casanave, (2019) inspects whether it is simpler to compose for distribution? He sees a few contemplations from experienced scholastics that composition for distribution can turn out to be more difficult after some time, particularly for instructed local English speakers. In any case, the trouble increments because fruitful composing relies upon different variables, like request and thinking abilities, experience acquired through time,

and determination. Their examination recommends that, rather than turning out to be more open, composing should become more testing as scholastic journalists partake in ongoing learning and progressively perplexing and energizing activities in their fields. The appropriate response is that when utilizing computerized, all that will become simple and pragmatic in the advanced time. Wadim Strielkowski, 'COVID-19 Pandemic and the Digital Revolution in Academia and Higher Education', 2020..

CONCLUSION

The purpose of this study has been answered that the presence of digital technology today has helped specialized programs and tools seek to support the research process at every step. This shows that while technology increases the skills and literacy required to complete research, it also increases the efficiency of each phase and the effectiveness of the final product. In research, what is the technology that is often used? Examining the research evidence also proves that the superiority of digital technology is a well-known research approach for technicians. On this basis, technology and technological research are defined as follows: Technology is defined as the study of artifacts with a focus on their production. Research to produce new and better artifacts is the definition of technological research.

By incorporating technology into the mix, the risk of human error is lowered while the research process is accelerated. Cloud-based technologies are starting to change the way academics collect data decades later. Our expansion reflects the growing demand for fast access to high-quality data. Likewise, our findings have

revealed that technology helps research learning. Several large-scale studies have found that incorporating technology into the learning experiences of hundreds of children in various schools and school systems is associated with more significant academic outcomes than equivalent classrooms that do not.

We have to admit that studies are looking for and proving digital advantages in research work produce significant benefits and results. This study also understands that there are shortcomings when working with our specialized machines finds that communication becomes empty. This is very different from manual studies which interact with humans. On the other hand, for example, the emergence of individualism because technology makes individuals increasingly independent of their fellow human beings. The more dependent humans are on technology, the more they forget about the advantages of humans, where human needs in an area cannot be produced or fulfilled by even the most sophisticated digital machine tools. The shortcomings of modern technology are more sophisticated research work, easy to use, making research work faster, easy access to information, encouraging creativity, etc., and many shortcomings, for example, when studies require very factual data where we have to find humans, which cannot be found in technology.

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