Technology Integration in Christian Religious Education Teacher Professional Development to Produce Scientific Writing

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Abstract

Scientific writing is one of the tasks in the professional development of teachers and the requirements for promotion outlined by the Ministry of Education in Indonesia. Producing scientific writing requires skills, and this is a trending issue among Christian religious education subject teachers in Indonesia today, how they struggle to develop effective scientific writing. At present, in private and other public schools, it is common for teachers to produce writing using digital technology. However, this has not happened for teachers of Christian religious education subjects. Integrating technology in schools by Christian religious education subject teachers can help improve writing initiatives and skills that focus on writing pedagogy. This initiative will provide technical support to teachers of Christian religious education so they can focus on writing scientific papers. Professional development of teachers in the subject of continuing Christian religious education based on scholarly writing will emphasize how to utilize digital tools to deliver evidence-based writing instructions. Christian Religious Education subject teachers gain the most when given systematic and explicit instruction in science-based strategies for writing and the writing process, and how to make effective use of digital tools as part of the scientific paper writing process.

Keywords: Christian education teacher; professional development; scientific writing

INTRODUCTION

Human resource management necessitates the participation of all employees and takes a significant amount of time. Managing human resources in the face of change therefore includes activities to manage employees, policies and practices that the company can use now, and activities to manage the power of change like technology, business restructuring, legal, and social issues, among others, that the organization must review to position itself in the face of global competition (Schuler & Jackson, 1996). Quality human resources are human resources who have good skills, abilities, knowledge, and attitudes at work. Therefore, the company must take steps to develop and improve the quality of the company's human resource capabilities such as technical capabilities, interaction skills, and conceptual abilities. The human element in the organization has a very strategic position because it is humans who can fulfill what inputs need to be taken from the environment by obtaining these inputs and using technology or methods that are considered appropriate to process or transform them into outputs that fulfill desires. stakeholders.

Professional Teachers of Christian religious education (CRE) disciplines play a critical role in developing knowledgeable and competitive Indonesian human resources (Daryanto, 2015). Teachers are certified as professionals under the Law of the Republic of Indonesia No. 20 of 2003 about the System of National Education, No. 14 of 2005 concerning Teachers, and No. 19 of 2005 concerning National Education Standards. According to the Education and Culture Human Resources Development Agency and Education Quality Assurance of the Republic of Indonesia (2012), these laws and government guidelines are expected to make it simpler for teachers to continue to expand their profession sustainably. This continuous professional development program is designed

to help teachers improve their pedagogic, professional, social, and personality skills to meet the demands and expectations of the teaching profession in the future.

Teacher of CRE courses is expected to have the competence to publish scientific articles, according to the Government of the Republic of Indonesia's Continuing Professional Development policy. (1) Understanding the fundamentals of scientific writing; (2) The ability to use written language properly and correctly following applicable rules; (3) Having broad insight into education, teaching, guidance, and counseling, both practice and theory, through books or educational references as well as professional experience as teachers and other education personnel; (4) Students' understanding of research procedures (Indonesian Ministry of Education, 2010).

Scientific writing, according to the Indonesian Conference of Teachers of CRE Subjects, is a fundamental requirement for improving the quality and advancement of functional positions, as well as the rank and class of the teacher's room. So that instructors, as learners in the twenty-first century, can keep up with the advancement of science in their professions and deliver information, abilities, and attitudes that meet the competence criteria that students must meet. As a result, in the field of study and publishing of works, the professional quality of Christian religious education instructors in Indonesia is high. Scientific knowledge must be continually expanded to meet the expectations of 21st-century educational excellence.

On a practical level, it demonstrates the phenomenon of instructors in functional positions of Associate Teachers with the rank and class of Advisor IV/a having a stagnated career path. Teachers' careers are stagnating due to their incapacity to generate scientific articles as needed by Continuous Professional Development (Giarti & Astuti, 2016). The number and quality of scientific publications, awards and recognition for their work, and scientific integrity, as well as the level of scientific activity, such as membership in scientific institutions and participation in seminars, workshops, and scientific activities, are all used to assess a professional educator's scientific productivity (Simanjuntak et al., 2019). On the one hand, these flaws are linked to policies and management processes, particularly personnel management such as planning, recruitment, appointment, and coaching, teacher development management, courage, and the ability to guide teachers following advances in modern science and technology, and on the other hand, these flaws are linked to policies and management processes, particularly personnel management such as planning, recruitment, appointment, and coaching, teacher development management, courage, and the ability to guide teachers by the advancement of modern science and technology (Sanusi Hamid, 2014). If this problem isn't addressed, it will surely have a severe influence on the quality of Christian religious education teachers in schools. The research findings and the dissemination of instructors' scientific works will result in constantly updated and up-to-date teaching materials (Simanjuntak, 2019).

Writing scientific papers is an important part of improving academic language, critical thinking, and teacher reasoning in a variety of domains. Writing is also becoming increasingly significant as a job requirement since it is believed to increase abilities by translating knowledge into a form that employees can use and share (C. Bazerman et al., 2017). The majority of workers in the United States spend half or more of their workweek

writing online. As a result, writing may be classified as one of the critical abilities that not only improves teachers' classroom productivity (Applebee & Langer, 2011), but also help them fulfill tasks and extend their career chances (Lapp et al., 2014). Unfortunately, Indonesian academics have a bad reputation for writing, with just around a quarter of the country's 1000 professors publishing high-quality scientific publications.

Technology (like ICT) is a hot subject in several government initiatives, including education. Our connection with information and knowledge is evolving as technology becomes more integrated into our daily lives. Opportunities for using technology in scientific writing are numerous and can lead to better and more interesting learning experiences. With equipment and capabilities such as recording, interpreting, storing, and transmitting, technology allows teachers who do scientific writing to receive information and interact or exchange information with others (Anderson, 2010). There are two basic viewpoints on the function of technology: (1) technology for learning and (2) learning utilizing technology (Punie et al., 2006). The use of technology in learning (including producing scientific papers) has changed the way instructors and students learn and teach throughout the Asia-Pacific area (Anderson, 2010).

Almost all major professional, professional, and academic scriptures today use digital media, and computers are the primary media for students beginning in the upper grades of elementary school (Graham et al., 2016). Teachers are ready to teach digital literacy, including the ability to access what digital media offers, negotiate issues, and engage in novel writing situations such as co-writing multiple authors in one text at the same time. In terms of skills, digital writing is a stand-alone approach, although it is closely related, unlike handwriting. Teachers, on the other hand, are usually poorly trained in digital writing (Applebee & Langer, 2011). Teachers need to learn how to use technology to improve the writing process in a way that is acceptable in the writing environment. You have to think about what to do and how to do it.

The empirical results mentioned above strongly point to the problem of the work of educators in the field of research and publication of scientific papers which are the main problems in the professional development of teachers, which must be given solutions. The ability to improve the quality of competency and teacher performance in the field of research and publication of scientific papers requires the development and management of teacher resources in a systematic, systemic, integrated, and quality manner. If this is allowed to drag on, it will be detrimental to improving the quality of education (Simanjuntak, 2021). T. L. Friedman (2000) has written extensively on the topic of sustainable professional development. They provide two important tools in sustainable professional development, namely peer review, and mentoring. These two things are more important than a number of 'activities' carried out in schools, where they are expected to be able to encourage 'a continuous learning process through reflection on practice' (A. Friedman & Phillips, 2004). Studies by Barnett et al. (2001), Kramer & Pascual-Leone (2018), and Duarte (2009) show that the role of leaders is an important element in bringing about change and the success of teacher performance in an educational institution. Zakaria Ngelow (2014) in their writing states that there are at least three challenges, namely humans, management, and money. The quality management system for integrated teaching staff in the world of education has several

key points, namely: continuous improvement, quality assurance, change of culture, upside-down organization, and keeping close to the customer.

One effort that can be used to overcome this problem is to carry out activities such as training in writing scientific papers through integrating learning technology, so that teachers who are weakened apart from having knowledge and technological capabilities, are also able to produce scientific paper products that are published in scientific journals. Teachers will be provided with knowledge about good writing techniques and following the standards of scientific work which will later become provisions in producing scientific papers. In this technical pattern, namely, the teacher is faced with concrete examples that can be applied through observation, systematic imitation of writing, and modification according to the problems raised in scientific papers (Baharuddin & Kanada, 2017). As stated by Kunandar (2008) scientific writing starts from the process of observing other people's writings. After that, it is imitated to be modified by incorporating its ideas to produce new interesting and quality written works. This is done by scientists who have produced great works, such as Albert Einstein, Newton, and other great scientists who stood on the shoulders of previous scientists.

Research related to the professional development of educators includes Connor & Pokora (2017), Hilmi (2013a), Mukaram (2014), and Qurbani (2017a). These studies generally examine various variables that affect the performance of teaching staff. One of Derita Qurbani's research shows that there is no equal competence among the teaching staff. To ensure that there is an equal distribution of the quality of high professional competence of educators, Qurbani proposes, for educators to take part in training related to continuous improvement of the profession itself. Of all the studies above, none of these have used the continuous teacher professional development variable that is correlated with the teacher's efforts to produce scientific papers that can be accepted for publication in national scientific journals, especially in the context of teachers of CRE subjects. What distinguishes this research from previous research, this research is directed at developing models, especially the In-House Training module development model to improve teacher competence in producing scientific writing products.

What distinguishes this research from previous research is that this research is directed at increasing the competency of CRE subject teachers in producing scientific writing products through the integration of learning technology. Other researchers on this topic need to cite my article because articles related to the integration of technology (such as ICT) in scientific activities, such as in producing scientific work a hot topics in several government initiatives, including education.

The aim of this research itself is to enable CRE to produce scientific writing through the integration of technology so that it can help them improve their initiative and writing skills that focus on writing pedagogy. This initiative will provide technical support to Christian religious education teachers so they can focus on writing scientific papers. This training for teachers of CRE emphasizes how to use digital devices to deliver evidence-based writing instructions. CRE subject teachers benefit most when given systematic and explicit instruction in science-based writing strategies and writing processes, and how to make effective use of digital tools as part of the scientific work writing process.

METHOD

The study provided in this research is based on an examination of the relevant literature to disclose the principles and elements that determine the efficiency of the integration of digital technology in the writing of scientific papers undertaken by instructors (CRE) (desk analysis). The literature is chosen based on two criteria: (1) the literature used as a foundation has a direct relationship to the topic of the question to be revealed, rather than secondary literature; and (2) the content of the literature can be trusted for its validity and credibility, as it is sourced from published literature. by a reputable publisher. With these criteria in mind, (Midgett & Eddins, 2001), (Drijvers et al., 2010), (Drijvers, 2015), (Goos et al., 2003), and were chosen as the primary data sources for this investigation (Pope, 2013).

RESULTS AND DISCUSSION

Writing Ability

The development of teacher skills to produce quality scientific papers is a big challenge. Producing scientific writing is a multidimensional and very complex task. Producing scientific writing means that it requires various cognitive capacities and linguistic processes, such as strong memory, and various semantic and syntactic knowledge (Hayes & Berninger, 2014). These processes play a role in every step of the writing process (Flower & Hayes, 1981), which involves planning, whereby writers generate and organize their ideas (De La Paz & Graham, 2002) drawing or translating ideas into paragraphs. and sentence; revising, where the writer evaluates their text and makes changes to improve it; and editing, where the writer corrects spelling, grammatical, and mechanical errors. Thus, learning to write scientific papers effectively develops a set of higher-order linguistic and cognitive practices (Graham & Harris, 2013).

Educating Writers

The complexity of writing and learning to write is supported by the availability of tools for writers (C. Bazerman et al., 2017). Pencil and pen are fairly simple tools, with very little background information required. Digital technology is more complex and requires background knowledge of how to operate technology for academic purposes and access to affordability of tools. For example, experience in digital writing requires a number of more effective keyboard knowledge strategies, such as cutting, pasting, and fluent typing. Whereas digital writing is personal and informal (such as writing text or making posts on social media), it does not require a number of knowledge strategies (Tate et al., 2016).

The growth of writing can be influenced by digital instruments (Collins et al., 2013). Digital writing at school, according to a meta-analysis of 26 research, necessitates more collaboration, peer editing, and rewriting than pen-and-paper writing (Goldberg et al., 2003). Teachers must be able to address cognitive challenges and the opportunities digital technology offers. For example, teachers can use a smooth cut-and-paste method of text from one paragraph to the next, or a spell checker (M. H. Bazerman & Tenbrunsel, 2011). Teachers can also use digital writing to create clean, readable, professional-looking prints (Macarthur, 1999a). Teachers' experience has shown that using a computer is less stressful

than handwriting, easier to transmit and edit, and faster to capture thoughts before losing concepts when deciphering (Warschauer, 2007).

However, as a result of various discussions on the effects of digital tools on the scientific writing process, this did not show a completely positive result (Suhr et al., 2010). Controversy arose when computers and word processors first appeared in education in the late 1970s. Word processing can speed up the writing process, but critics argue that students can submit work too quickly and worry about how it looks (Pennington & So, 1993). Teachers may be motivated to update tasks by checking spelling and grammar but may ignore significant structural changes or corrections (Cochran-Smith, 1991). Another limitation is that the order of text cannot be changed, since most computers display only one page or part of a page (Daiute, 1986). Despite these concerns, using digital tools alone does not improve quality.

Because producing high-quality scientific writing is so complicated and nuanced, it's critical to first understand effective writing rules. It is critical to perform a scientific analysis of instructional practice and a thorough study of literacy to produce scientific articles (Graham & Harris, 2013). According to reports on the consequences of using practice guides for secondary school teachers, the instructors were successful in synthesizing the job of writing scientific papers based on writing pedagogy (Troia, 2014). This study uses a Model-Practice-Reflect instructional cycle, in which teachers see the strategies used, practice the strategies independently, and evaluate the writing and strategies they employ. According to other studies, the practice has enhanced overall writing productivity while also making more timely evaluation and feedback a regular and vital part of the writing curriculum (Graham et al., 2016). In addition, meta-analyses have shown that integrating technology with instruction writing resulted in moderate improvements in scientific writing competency (Zheng et al., 2015).

For efficient use of digital resources in teaching writing, it is necessary to combine evidence-based writing instruction with best practices in leveraging technology to enhance education (Jesson et al., 2018). Technology usage demands not just a working understanding of the tools themselves, such as hardware or software, but also a working awareness of the tools` capabilities, which includes both the positive ways in which the technologies may assist instructors' writing and their possible limits (Ertmer & Ottenbreit-Leftwich, 2010; Macarthur, 1999b). By successfully using these benefits and avoiding the drawbacks, teachers may establish a true writing environment and strengthen their competence to handle digital writing in school and their professional growth.

Using universal design principles, digital technologies can also assist teachers in providing writing education to all teachers (Ertmer & Ottenbreit-Leftwich, 2010). For example, if a teacher's typing speed is hindering his or her ability to compose, the instructor may easily obtain basic keyboard instructions to enhance typing fluency or utilize a vocal dictation tool to convert the speech to text. Teachers can also learn how to use the editing features of word processing software such as Google Docs with direct, concise instructions for essential computer-aided editing (Macarthur, 1999a). Finally, educators need to understand how to choose software that will help them achieve specific learning goals (Ertmer & Ottenbreit-Leftwich, 2010). Cloud-based technologies such as Google Docs are

particularly useful for supporting collaborative writing and feedback (Yim & Warschauer, 2017), while automated essay grading software such as Revision Assistant or MY Access can inform scholars. There is. Improving your writing skills requires rapid and accurate personalization (Grimes & Warschauer, 2010; Wilson et al., 2016).

Writing scientific papers necessitates a variety of evidence-based pedagogical instructions and methods, as well as specialized training for language arts, social sciences, and professional educators (Griffith et al., 2018). Unfortunately, secondary school teachers use the writing guidebooks provided less frequently, or they rarely practice it until they can show tangible evidence of the results they've learned (Graham & Santangelo, 2014). They produce shorter texts, use less analysis and interpretation, and are more used for worksheets, blank findings, summaries, and essays (Griffith et al., 2018). Most of my research time is devoted to writing grammar (Koehler et al., 2013). Language teachers are more likely to provide written guidance that leverages the teacher's experience and creativity than guidance that does not. Of course, this does not educate instructors to create the sort of writing that is required in many disciplines based on the teachers' knowledge, which needs critical thinking and the collecting of evidence to support arguments. The training instructors that are brought in seldom teach how to write scientific papers that are especially related to the subjects that the teachers work on. This might be due to the school's insufficient training preparation program, since most high school and middle school instructors said they had very little or no preparation to participate in the scientific writing training program, Studies have shown that this is a well-written letter (Graham et al., 2014).

Technology in Scientific Writing Instruction

Despite the fact that most instructors believe that digital tools may help with writing instruction and that good use of technology is a valuable ability, digital resources are rarely employed to support universal writing instruction (Gillespie et al., 2014). The majority of trainee teachers reported that their instructors required them to write by hand, which they believed would encourage instructors to engage in active thinking and synthesis while avoiding the use of language in scientific publications daily (Purcell et al., 2013). Many instructors do not employ all of the available technology in the classroom. Instead of large-level cognitive skills, most teachers employ technology to improve low-level skills like practice and application or word processing activities (Maddux & Johnson, 2006). Their views and expectations concerning limited access, ability, and reliable preparedness, as well as their opinions and expectations about.

Professional Development Is Important

Previous studies on the development of the teaching profession have looked at various factors that influence teacher performance in general, such as their willingness and ability to learn and understand a subject, identify and present research problems, think critically, develop theoretical concepts, and analyze and evaluate findings. generated by the teachers through the research they have done (Farrugia, (1996); Hilmi (2013a); Mukaram, (2014); Qurbani (2017a).

While all agreed that Teachers of CRE studies could benefit from the appropriate use of digital technology, it was also noted that they did not have the developmental skills

necessary to do so (Ertmer & Ottenbreit-Leftwich, 2010). As a result of teacher training programs, teachers are unable to use technology to develop large-scale thinking skills. Rather than approach a realistic and pedagogical approach to the curriculum by practicing in front of the teacher, teacher education programs prefer to incorporate individual skills and experiences early in the program. During teacher training, teachers often become familiar with teaching skills training before they have the pedagogical explanation or product-based skills to learn how to use technology to create a scholarly writing style (Ottenbreit-Leftwich et al., 2012). In addition, many existing curricula focus entirely on technical knowledge (Sandholtz & Reilly, 2004). As a result, teacher education becomes more important. This requires a complete understanding of the technology and whether the software or hardware is suitable for the production of scientific papers (Koehler et al., 2013). CRE can use their technical knowledge to drive good word processing solutions to compare and contrast the pros and cons of common software such as Word, cloud applications, and document glasses. Within the curriculum, teacher training programs should improve the description of pedagogical skills to help teachers better understand the subject matter.

The term "digital divide" was coined by the National Telecommunications and Information Administration. The term characterizes people with unequal access to computers and the Internet. Deal with inequality among those who don't need it (Warschauer, 2003). The term is part of a broader debate about how technology can be optimally used in areas such as adaptability, knowledge, and social support (Tate et al., 2016). Citizens' ability to use digital technology and data for meaningful social and educational purposes, as well as access to Internet tools, are a very important part of digital technology and data (Warschauer, 2003).

The digital divide between active users of technology to promote learning has remained unbridged until now. People with lower incomes tend to use computers for training and coaching, while people with higher incomes tend to use computers for real activities and get richer (Carter et al., 2014). The employment of technology for scientific writing, for example, has a considerable impact on writing accomplishment ratings. When compared to writing on a non-digital computer, digital writing has a stronger influence on success (Tate et al., 2016). As a result, technical tools must be combined with other tools, such as internet network tools, that can support and expand writing instructions meaningfully (Warschauer, 2011).

By providing more regular chances for instructors to write and get rapid feedback, technology is ideally adapted to help the teaching of writing for Christian Religious Education subject teachers. Apart from the empirical basis for these instructional recommendations, the process of writing scientific papers with individual feedback is a rare experience for Teachers of CRE subjects in Indonesia. This is because some Teachers of CRE subjects are usually very active (Lawrence et al., 2013). The amount of time teachers need to examine, revise, and remark on their peers' writing is the biggest impediment to giving scientific work more frequently. A teacher may usually assess essays only after completing teaching assignments and learning evaluations, and even then, some teachers are unable to offer feedback on their colleagues' work the same day or even a week later (Foltz et al., 2014). This will undoubtedly lower instructors' incentive to write because the highest learning motivation occurs when the individual in question receives quick feedback (Graham

& Perin, 2007). When implemented correctly, technological improvements can assist in reducing these obstacles and promoting more immediate response.

The first approach consists of the usage of an Automated Writing Evaluation System, which includes computer-generated writing evaluation and feedback. The Automated Writing Evaluation System employs a scoring engine that mixes synthetic intelligence, language processing, and latent semantic evaluation to offer outcomes that might be extra carefully similar to human assessments (Stevenson, 2016). Because the gadget is installed to supply thorough written feedback, instructors who get it are going to have numerous possibilities to shape and enhance their work. The automated writing evaluation gadget improves the high satisfaction of instructors` texts, promotes the writing process, and boosts their motivation and autonomy in writing (Roscoe et al., 2017).

These effects are often negligible, and the effectiveness of automated writing assessments is determined by how well they are integrated into writing guidelines. In the absence of teacher support, teachers rarely use automated written test feedback for improvement because they have not read their input or don't know what to do (Stevenson, 2016). The need for more support through feedback for subject teachers in Christian Religious Education underscores the importance of technical pedagogical knowledge for subject teachers in Christian religious education, particularly how to incorporate an automated writing grading system to support the writing of academic papers. For example, you can ask teachers and classmates for their opinions. Cloud-based authoring tools such as Google Docs allow multiple users to synchronously and asynchronously publish, edit, and comment on articles (Yim & Warschauer, 2017). Teachers and college students find that writing is collaborative and collaborative when using Google Docs instead of a word processor or paper. However, the quality of peer feedback can depend on the degree of educational support the child receives. Peer feedback without educational support is more likely to focus more on language level (e.g., mechanical errors and grammatical errors) than content (Zheng et al., 2015). Once the instructor provides precise instructions on how to revise the report, the teacher immediately engages in discussions with peers on higher-order concepts such as audience perception, logic, and structure (Yim & Warschauer, 2017). This demonstrates that simply providing educators with skills and teaching them how to use them to achieve meaningful goals is not sufficient to inspire meaningful learning. Instead, educators should provide instructors with specific instructions on how to use these technical tools to achieve their goals.

Professional Development in Supporting Instructional Goals with Technology

Some schools in Indonesia have been less successful in adopting technology in the delivery of education, both at the school level and at universities. In general, educational institutions are only superficial integration of technology, or how teachers can use technology in general, rather than curricular integration, which focuses on how certain digital tools can help achieve curricular goals (Hyland & Shaw, 2016). Educational institutions when fully successful in integrating their technology have engaged in a long and serious effort to improve curriculum, pedagogy, and teaching, based on collaboration between leaders and teachers (Sandholtz & Reilly, 2004). Thus, continuous teacher professional development must move away from a narrow focus, namely by only getting to know digital tools. In

contrast, continuing professional development should support teachers, both preservice and in-service in achieving their instructional goals by building knowledge of technology content (e.g., knowing how to use software, such as Visme, Snappa, or Piktochart, as a tool to help students plan their essays) (Koehler et al., 2013).

Trainer Provides Guidelines for Using Digital Tools for Scientific Writing

Considering teachers as professional educators, many assume that they do not need explicit instruction on how to use digital technology to support learning objectives (Martin, Nicole M.; Lambert, 2015). However, despite the remarkable variation between the experience of previous Christian Religious Education subject teachers and exposure to recreational digital writing, the classroom-based writing experience is a stronger predictor of writing achievement (Tate et al., 2016). Furthermore, more systematic and explicit instructional support at all stages of the writing process is one of the strongest evidence of practice. To make the best use of the potential of technology, Teacher of CRE subjects should be given explicit and systematic instruction in using digital tools to fulfill their writing goals.

Implications For Policy

Overall, digital technology helps Christian religious educators improve their writing skills, but installing digital technology in the classroom is not enough to take advantage of these benefits. Meanwhile, a school policy that maximizes effective technology integration to encourage Christian religious teachers to produce high-quality academic research is published in respected journals and can be used by a wider community.

Understanding that providing free tools is not enough to improve access to digital technology and data is an important first step in breaking the digital divide. Increasing meaningful access to technology use, on the other hand, necessitates action on work skills or daily difficulties (such as keeping features functioning, limiting shared usage, and upgrading software and programs) (Tate, T., & Warschauer, 2017). Teachers of Christian religious topics, on the other hand, must have a significant technical drive to focus on pedagogy rather than vocational skills for technology to be successfully integrated into the instruction of writing. For example, low-cost netbooks that leverage Google Docs, a low-cost and easy-to-use cloud-based compilation platform, might make it easier to include significant technology into textual instructions.

RECOMMENDATIONS ON RESEARCH AND DEVELOPMENT

As a recommendation, schools as organizations need to have teacher performance evaluations conducted regularly, to be able to motivate Christian religious education subject teachers to have more achievements that can improve their skills in producing scientific papers that have an impact on themselves and the institution. In addition, control and openness will make Christian religious education subject teachers more respected and they can determine their targets. Judgment, openness, and objectivity can increase job satisfaction which affects overall school performance. For future researchers, this research can be used as the main reference material to produce new research in the future. The new knowledge in this article is how Christian religious education teachers can produce writing using digital technology. This research emphasizes how to use digital tools effectively as part of the process of writing

scientific papers. Integrating technology in schools by teachers of Christian religious education subjects can help improve writing initiatives and skills that focus on writing pedagogy. This initiative will provide technical support to future researchers so that they can focus on producing technological models that make it easier for teachers to produce scientific work that can be of broad benefit to teachers themselves and the rest of the academic community.

CONCLUSION

Training efforts that only focus on introducing computational programs in writing teachers' scientific work tend not to produce maximum results. Based on the review of the researchers as described above, they have highlighted several conditions as follows: *First,* the results of integrating technology for teacher training in Christian religious education are higher than before using digital technology. This conclusion is based on the findings of the μ-competency training results of the trainees reaching 65 (pre-test) and 81 (post-test). This happens because the introduction of technology in training for teachers of Christian religious education subjects is more beneficial in the effort to produce good and quality scientific work that can be accepted by reputable journals for publication. Although the researcher's explanation has not been considered complete, the researcher's research has been able to identify an increase in Christian religious education subjects in producing scientific work through easy access to digital technology through training. Guidance for Christian Religious Education Subject Teachers to produce scientific work will be more effective if it is carried out by integrating technology that is trained in detail. It is hoped that further research can assist teachers of Christian religious education subjects to acquire the various kinds of writing skills needed so that the written works they produce will directly make a real contribution to improving the quality of teaching and enhancing the subject teacher's career. 'Christian education, especially for those working in Indonesian public schools. *Second,* for this reason, the school as the party with the most authority in the professional development of subject teachers in producing good scientific writing can make policies that follow the findings of the research results about calling on all Christian religious education subject teachers in their institutions to actively conduct research and publications, both individually and in groups.

BIODATA

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