

# Technostress Coping Mechanism and Workload Management on Technological Proficiency of Teachers

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#### Abstract

This study highlighted the impacts of technostress coping initiatives and management approaches about workload on technological competence of basic education teachers within the division of Bukidnonspecifically in San Fernando II. The study used descriptive-correlational design. 250 teachers are respondents are randomly selected from the public schools in the division. Data were gathered through validated questionnaires focusing on technostress coping mechanisms (emotionfocused, problem-focused, social support and avoidance), workload management (non-teaching, support/management and administrative activities), and technology-related proficiency (email, www, integrated applications, technology in teaching, emerging technologies and related skills). Finally, descriptive statistics, Pearson's correlation, and multiple regression analysis were used to highlight relationships and predictive power among the different variables.

Results show that the technostress coping strategies were highly applied by teachers, with much of social support coping (M = 4.35) and problem-focused coping (M = 3.89) being reported as the most common. Workload management was rated high for management, especially for non-teaching activities (M = 4.07). Technical proficiency was the same across all skills. (overall female M = 3.92). Correlation analysis revealed a significant positive relationship between technological proficiency and problem-focused coping (r = .224, p < .001), social support coping (r = .207, p = .001), avoidance (r = .232, p < .001), and non-teaching activities (r = .340, p < .001). Regression analysis identified non-teaching activities ( $\beta$  = .295, p < .001), avoidance coping ( $\beta$  = .189, p = .001), and problem-focused coping ( $\beta$  = .159, p = .007) as significant predictors, accounting for 18% of variance in technological proficiency(R<sup>2</sup> = .180, F = 19.979, p < .001). Findings endorse the efficacy of adaptive coping strategies and effective workload management concerning their empowerment of teachers digitally. There is potential, then, to address the technostress elements and improve management of non-teaching tasks among teachers via targeted interventions to accomplish superior digital competencies.

#### INTRODUCTION

Background of the Study



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From the integration of technology into education, an environment has thrived with a paradigm shift on teaching-learning processes; thus, technological readiness has become one of the skills that the teacher needs to master. This being said, technostress and an increasing workload have managed to render technology use and similar proficiencies as a problem for many educators. Simply stated, technostress refers to the anxiety, cognitive overload, and poor performance that people experience due to their inability to adjust to technological novelties (Tarafdar et al., 2011; Wang et al., 2020). For instance, for teachers, technostress translates into frustrations with software tools, difficulties in using online platforms for instruction, and stress from being constantly connected-all of which diminish their ability to integrate technology into their classrooms effectively (Kim et al., 2023; Chou & Chou, 2021). The pandemic has practically accelerated a shift to purely online and hybrid classrooms, engendering further technostress while also unmasking gaps in teachers' technological skills (Alenezi et al., 2023; Upadhyaya&Vrinda, 2021).

An added blow for teachers is the aspect of workload management, balancing preparation and teaching with non-teaching duties such as administrative and support tasks. This significantly heavy workload can bring about stress in case of poor management and kill much time and energy that teachers would have extended towards developing their technology skill (Oksanen et al., 2023). Studies reveal that inappropriate coping strategies and malfunctioning workload management will only cause more harm for the cause of integrating technology into pedagogy by teachers (Tarafdar et al., 2014; Kim et al., 2023). Thus, it remains of high concern that these technological abilities of teachers directly affect instruction quality and learning outcomes. Beyond understanding the coping mechanisms for technostress and workload management in relation to teachers' technological proficiencies, intervention designs should also be catered for to assist teachers fight these hindrances and enhance their digital competence.

Technological proficiency was essential for educators to effectively facilitate learning and enhanced student engagement. Research had shown that teachers who possessed high levels of digital competence are more confident in using technology, leading to improved instructional delivery and efficiency in managing their workload (Ragu-Nathan et al., 2008). On the other hand, those who struggle with technology often experienced increased stress and reduced productivity, which negatively affects their overall teaching performance. The importance of digital proficiency had been emphasized in various studies, highlighting the needed for continuous training and support to helped teachers navigated the evolving technological landscape (Ayyagari et al., 2011). By equipping educators with the necessary skills, schools were able to foster a more effective and technologically proficient workforce that can enhanced student learning outcomes.

Multiple interlinked problems are at the heart of the problem of technological fluency among teachers. The rapid pace of technological changed often outpaces educators on the pulse, many teachers feel that they are merely just keeping up with technology in order just to keep some semblance mastery over the new digital tools and platforms (Tarafdar et al., 2019). This is compounded with insufficient training and failure to receive the necessary institutional sustenance rein for teachers to teach with the technology that are available. Both these systemic issues and then add additional challenges to the mix in terms of social divides, socioeconomic divides i.e., psycho-behavior factors. Teachers in the underresourced areas have not access of digital devices and resources necessary for skill development (Punie&Redecker, 2017). In addition, adoption of technology could be very challenging due to



psychological factors of technophobia/ change resistance/anxiety about implementation in digital space. We need to go beyond these challenges and allow arms of trained teachers with the right tool for the current digital era, to create engaging learning environments for their students.

This study,the technostress mechanism and workload management served as key components in addressing the challenges of technological proficiency among teachers. By implementing strategies to reducedtechnostress, such as comprehensive training programs, peer support systems, and adaptive learning environments, teachers will be better equipped to manage technological challenges effectively. These interventions aimed to enhance their digital competence and reduce anxiety associated with technology use.

Workload management is another crucial factor in improving technological proficiency among educators. Excessive workload often prevents teachers from dedicating time to learning and mastering digital tools, leading to increased stress and decreased efficiency (Ayyagari et al., 2011). By implementing workload management strategies, such as time management training, digital resource optimization, and workload distribution techniques, schools can create a more balanced work environment for teachers. Providing educators with the necessary support and resources to manage their workload effectively will enable them to focus on improving their technological skills and integrating digital tools seamlessly into their teaching practices.

The purposed of this study would explored the relationship between technostress mechanisms, workload management, and technological proficiency among teachers. This research aims to identify effective strategies for reducing technostress and enhancing workload management to improve digital competency in the educational sector. By examining these factors, this study will contribute to the development of comprehensive policies and programs that support teachers in adapting to technological advancements. Through empirical findings, this research will provide valuable insights into how educational institutions can create a conducive environment for technological skill development, ultimately leading to enhanced teaching effectiveness and improved learning outcomes for learners (Tarafdar et al., 2019).

## Statement of the Problem

This study determined the level of Technostress Mechanism and Workload Management on Technological Proficiency of the teachers in the Department of Education, Division of Bukidnon.

Specifically, it sought to answer the following:

- 1. What is the level of the technostress coping mechanism of basic education teachers practice in terms of:
  - a. Emotion-focused;
  - b. Problem-Focused;
  - c. Social Support and;
  - d. Avoidance?
  - 2. What is the level of workload management of teachers' in terms of:
    - a. non-teaching activities,
    - b. support and management activities, and
    - c. administrative activities?



- 3. What is the level of technological proficiency of the teachers in the following factors:
  - a. email;
  - b. www;
  - c. integrated application;
  - d. teaching with technology;
  - e. teaching with emerging technologies; and
  - f. emerging technologies skills.
- 4. Is there a significant relationship between the technological proficiency of teachers', and
  - a. technostress coping mechanism; and
  - b. workload management?
- 5. What variable, singly or in combination, best predicts the technological proficiency of the teachers?

#### Objectives of the Study

This study is designed and evaluated the technological proficiency of teachers in the Division of Bukidnon as influenced by the technostress mechanism and workload management.

- 1. Assessed the level of technostress coping mechanism do basic education teachers practice in terms of:
  - a. Emotion-focused;
  - b. Problem-Focused;
  - c. Social Support and;
  - d. Avoidance?
- 2. Determined the level of workload management of teachers in terms of:
  - a. non-teaching activities,
  - b. support and management activities, and
  - c. administrative activities?
- 3. Assessed the level of technological proficiency of the teachers in the following factor:
  - a. email;
  - b. www;
  - c. integrated application;
  - d. teaching with technology;
  - e. teaching with emerging technologies; and
  - f. emerging technologies skills
- 4. Correlated technological proficiency, technostress mechanism, and workload management; and



5. Identified the variable singly or combinationthatbest predicts on technological proficiency of the teachers.

#### Significance of the Study

The result of this study helped teachers to determine thetechnostress mechanism and workload management that has significant impact that make them technologically proficient, thus enhancing teachers' professional progress in the field.

To the Department of Education-Division of Bukidnon, the result of the study benefited them by providing a deeper understanding of how technostress impacts teachers' performance and well-being. The outcomes guided the development of policies and training programs that reducestechnostress, improved workload management, and enhanced technological proficiency among educators. It contributed in creating more supportive teaching environment, ultimately improving the quality of education in the region.

For administrators, the findings served as a foundation in implementing effective strategies to address technostress within their institutions. By identifying key factors contributed to technostress and its effects on workload management, administrators would be better equipped and designed flexible work policies, provided technical support, and foster a culture of collaboration. These measures ensured that educators could navigate technological demands efficiently while maintaining their productivity and job satisfaction.

Learners and stakeholders benefited this study as that aimed to improve the overall educational experience. By addressing technostress among educators, the study will indirectly enhance teaching quality and student engagement. Stakeholders, such as parents and community members, gained confidence in the educational system's ability adapted in technological advancements while prioritizing the well-being of both teachers and learners.

Future researchers find this study valuable as it provided a comprehensive framework for exploring the relationship between technostress, workload management, and technological proficiency. The findings could serve as a reference for further studies on mitigating technostress in various educational settings or other professional fields. Moreover, it opened a new avenue for examining long-term solutions in sustaining technological integration without compromising mental health and productivity.

## Scope and Delimitations of the Study

This study focused on determining the teachers' technological proficiency in relation to technostresscoping mechanism and workload management. The respondents of the study were randomly selected, 250 teachers in the Division of Bukidnon. The questionnaires are modified from those used by various researchers and tested for validity and reliability.

One of the delimitations of the study is the sincerity of the respondents' answers on the survey questionnaire items because this could have an impact on the accuracy of the data. The questionnaire method was used as a tool to gather the needed data in this study.



#### **Definition of Terms**

For better understanding of this study, the following terms are defined operationally: Administrative work a daily procedure that keep a school ran smoothly (records management, communications and ensuring the school is totally following all rules and regulations in place.)

Avoidance (technostress coping) refers to a kind of avoidance used by the teachers to avoid technology related stress as they try and avoid the technology itself or looking at it as much as possible.

Digital fluency the skill of a teacher who can use digital tools and digital resources for teaching, learning & professional work with confidence and effectiveness.

Digital divide is an unequal distribution of technology and digital know-how, so diverse teachers have access to more devices than others.

E-mail refers to personal communication or communication/conduct together enough sense of email, collaboration, associated teaching and administrative tasks.

Technostress coping (emotion-focused) it is dealing with stress in technology by regulating your feelings and outlook (e.g. Be optimistic, etc, or practicing relaxation)

Emerging technologies are skills that enable you to learn and begin to use new/upcoming technologies in teaching (e.g., how to teach with this shiny thing)

Well incorporated refers to using one program that has multiple functions (ex: word processing, spreadsheets, and/or presentations) so the work is done quicker

Learning management system (lms) is online portals where teachers upload course content, communicate with students and manage assignments/ grades.

Non-teaching responsibilities are things that teachers do outside of their direct instruction, such as attending meetings, school events and communicating with parents.

Problem-oriented technostress coping refers to addressing the root of technology related-stress by fixing things such as getting the training, finding out technical help.

Professional development programs are a workshops and trainings for teachers to improve their skill in using technology, mainly (and critically) for well-teaching.

Technostress (technology-related stress coping) it is looking to friends, family or colleagues for advice support during the stress caused by technology problems.



Support and management tasks taking actions to assist the overall teaching-learning environment, e.g. Support colleagues by mentoring them, re-organizing resources or promoting district wide initiatives. Integrating new digital tools and methods in teaching integrates teaching with the use of new digital tools and approaches to make learning fun and engaging.

Technology in teaching is using technology to support and extend traditional methods of teaching.

Technological expertise it refers to how well or uncomfortable a teacher is with technology that can be used to improve their teaching and workload.

Technostress is a cause of burnout among teachers from being inundated with the business of technology in their work.

Technostress mechanism is a procedures or arbitrary measures by which a teacher gets rid of, reduces from within, and controls his/her technostress situation.

Workload it is organizing and delegating the workload that comprises teaching responsibilities, other tasks to avoid burnout and practicing for well-being.

Www (world wide web) refers to competence to appropriately seek, find and apply online resources/ information for teaching and learning

## THEORETICAL FRAMEWORK

This chapter reviews related literature and theoretical underpinnings pertinent to the research. It also includes the conceptual framework, the research paradigm, and the hypothesis of the study.

#### Review of Related Literature and Studies

#### Technostress Mechanism

Dealing with technostress, or the stress we get from using technology, can feel overwhelming, but there are many ways people cope with it. So how do people deal with technostress—the stress that comes from using technology. There are many different strategies folks used, like focusing on their emotions, tackling the problems head-on, leaning on social support, or just trying to avoid the whole thing. Every strategy has advantages. The goal of emotion-focused coping is to control your emotions when technology becomes too much to handle. Particularly for entrepreneurs, practices like mindfulness and seeing the bright side of things can significantly lessen the anxiety brought on by technology. They became more resilient and were able to make better decisions when they controlled` their emotions (Krejci, 2017). But here's the catch: if stressed sticks around for too long, this method did not work as well, especially for people with high blood pressure who don't use emotional strategies when stress is cranked up (Kabat-Zinn, 2003).



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Problem-focused coping, on the other hand, is all about confronting those technological irritations head-on. Thisentailed making the most of your gadgets or seeking assistance when necessary. According to research, being in charge of your work and addressing issues in a methodical manner could significantly reduced information overload. But, if someone relied too much on helped from others—especially if they had anxiety about being too attached to people—that can actually backfire (Tarafdaret al., 2010). This method worked as great job that depended heavily on tech since it gave individuals the tools to managed their tasks better. By addressing the actual caused of technostress, these problem-focused strategies could help lower stress and boost productivity in a sustainable way.

The strength of social support comes next. It provided emotional boosts and aid in problemsolving, which can help people deal with technostress. Teachers who relied on their peers during the COVID-19 epidemic reported feeling less stressed by technology, even when they had to abruptly transition to online instruction (Lee et al., 2021). For instance, university students with strong social circles tend to struggle less with internet addiction and enjoy a better quality of life because their friends and family help counteract the loneliness that can come with technostress (Kuss& Griffiths, 2011).. In addition to enhancing emotional well-being, social support facilitates the exchange of workable solutions, which greatly increases the effectiveness of both emotion- and problem-focused coping.

On the other hand, there's avoidance coping, where people try to escape from their stressors. While this might give you a little break from your feelings, it often can make technostress worse over time. Avoidance is linked to worse PTSD symptoms and makes it harder for folks to adapt to tech demands—like when educators dodge tech problems while teaching remotely (Krejci, 2017). It can cause missed chances to improve skills and solve issues, which just piles on more stress when tech problems stick around. This really emphasizes why it's essential to face tech challenges head-on instead of running away.

Altogether, these strategies emphasize how important it is to pick the right coping approach depending on the situation. Problem-focused methods often work best for those who have a harder time opening up, while emotion-focused strategies might fit better for people who are more anxious about their attachments. Plus, having social support can boost both coping methods by strengthening resilience. On the flip side, avoiding problems can really undermine good coping even though it might seem appealing at first. This shows that customizing our strategies to what we individually need can make a big difference in managing technostress (Tarafdar et al., 2010; Lee et al., 2021). If we get a grip on these coping styles, we can navigate the stress that comes with technology and keep our relationship with it a lot healthier.

## Workload Management

Workload management plays a crucial role in ensuring that educators maintain efficiency, wellbeing, and job satisfaction in their profession. The increasing demands of technology-driven education require teachers to balanced various responsibilities, making effective workload management essential in preventing burnout and maintaining high performance. Managing teachers' workloads is a big deal in our schools, especially when it comes to balancing teaching and all the extra duties they have to juggle. Those non-teaching activities, like putting together after-school programs or keeping an eye on events, really pile on the pressure. Studies show that when tasks aren't assigned well, teachers end up feeling unsatisfied and overworked because they're often stuck doing things that aren't really their cup of tea



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(van der Meulen, 2019). Take agricultural educators, for instance—they spend hardly any time on adult education but put in a ton of hours prepping for class, which just isn't the best use of their time (Workload Distribution Among Agriculture Teachers, 2008). When teachers are overloaded with nonteaching stuff, they have less time for creating lessons and giving feedback to students, which just adds to their stress and can hurt the quality of teaching (Pacaol, 2021). Clearly, we need better systems in place to share those non-teaching tasks fairly while also considering what teachers prefer and can handle.

Teachers are additionally strained by administrative tasks, which frequently divert them from their primary responsibility of instructing. According to a South Korean study of instructors, they had little time for lesson planning or interaction with pupils because of all the paperwork and reporting they had to handle (Kim, 2019). It was difficult for instructors in Bandung to provide individualized supported their students because they were overburdened with administrative tasks and had to balance several responsibilities at once (Analysis of Human Resource Limitations, 2024). Some clever solutions have been demonstrated and reduced the workload and return the emphasis to teaching, such as the used of digital tools assisted with attendance and grading. But if schools stick with outdated or disjointed systems, it created inefficiencies, which is why investing in better integrated platforms is super important.

Support and management activities are important in reducing those heavy workloads. Collaborative strategies, like sharing resources or team teaching, could took the pressure off individual teachers and help promoted teamwork In the UK, schools with effective senior leadership teams (SLT) discovered that teachers reported feeling less stressed, thanks to greater communication and regular checks on workload that established reasonable goals (CooperGibson Research, 2018). On the other hand, early-career teachers frequently bear the brunt of inadequate support, as they battle the stress of juggling numerous conflicting demands (Factors of Professional Burnout, 2023). Professional development programs, such as those in North Sumatra, can significantly improve teachers' time management abilities and change their teaching philosophies, allowed them in concentrating on the most important assignments (Educational Stewardship, 2024).

Getting workload management right is all about making some big changes in how schools run and how everyone thinks about their roles. For example, using mixed-integer linear programming models handed out non-teaching tasks showed how we could cut down on overworked by ensuring assignments aligned with teachers' preferences (van der Meulen, 2019). Policy changes that optimized all the red tape and clarified roles are also essential in cutting down the confusion that adds to stress (Factors of Professional Burnout, 2023). Schools that take a comprehensive approach—mixing in tech, team planning, and well-being initiatives—often see a boost in both teacher retention and teaching quality.At the end of the day, finding the right balance between efficient admin work and what really matters in teaching needs teachers, administrators, and policymakers kept chatting to ensure everything fits together with the reality in classrooms.

## **Technological Proficiency**

Proficiency in technology is crucial for educators nowadays as it enabled them to integrate technology into their lessons. Teachers could improve the efficiency of their courses, increased student participation, and better handled paperwork after they learn how to used digital tools and applications.



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Take email, for example—it's a key part of keeping in touched with students, parents, and colleagues. According to Lai and Hong (2015), when teachers know how to used email well, they can communicate easily with everyone, which leads to better teamwork and faster feedback. In a similar vein, Bhat, Raju, and Parvathi (2018) noted that email promoted learning even after class and makes educational materials more accessible. However, a teacher may find it difficult to manage documents or respond promptly if they are not very comfortable with email, which might reduce the effectiveness of instruction.So, getting good at email can really help teachers handle their workload better and boost their productivity.

The ability to use the World Wide Web (WWW) is essential for professional development, lesson planning, and information retrieval. Because there is so much educational information on the internet, teachers have access to a vast array of learning tools and teaching methodologies. Effective internet users may focus on student-centered learning, integrate multimedia into their lessons, and increased their own knowledge, according to Teo et al. (2016). Furthermore, web-literate teachers are better able to evaluate online resources and incorporate reliable material into their classes (Zhao, Pugh, Sheldon, & Byers, 2002). A teacher could have inaccurate information, inefficient use of resources, and less effective education if they are not proficient in online learning. Teachers could provide their students with engaging and creative learning experiences by honing their web abilities.

Integrated applications are essential for making educational processes smoother, offering a unified platform for teaching, assessment, and communication. Tools like Google Classroom and Microsoft Teams, which are types of learning management systems (LMS), help educators organize their materials, track student progress, and create engaging learning experiences. As Spector, Merrill, Elen, and Bishop (2014) point out, when educators incorporated these digital tools into their teaching, it boosted student collaboration and personalizes learning. Hew and Brush (2007) also note that the successful use of these integrated applications relies heavily on teachers being comfortable navigating these platforms. Without the right tech skills, educators might find it challenging to handle digital grading, share content, and engage with students online, which can lead to more stress and a heavier workload. By improving their tech skills with these applications, teachers can make classroom management easier and encourage more effective learning environments.

Teaching with technology and keeping up with the latest tech skills are super important parts of modern teaching. Teachers needed on board with all the digital tools we have today. Stuff like interactive whiteboards, online quizzes, virtual simulations, and AI-driven tools had really shaken up the way we teach. Koehler and Mishra (2009) talk about TPACK, which basically means teachers need to know how to blend tech with their subjects to make it all work. Plus, Voogt and the gang (2013) point out that getting good at using tech in teaching can really engage students and boost their grades. Newer technologies, like augmented reality, gamification, and adaptive learning platforms, are changing the game in education. Wang, Teng, and Chen (2015) say that teachers who jump on these trends can create bright and engaging lessons that fit all kinds of learning styles. But if teachers aren't confident with these new tools, they might struggle to use them to make their lessons better. By building up their tech skills and staying updated, teachers can more effectively use advanced digital resources in their classes, leading to a more interactive and impactful experience for their students.

## Conceptual Framework



This study will illustrate that technostress mechanism and workload management are critical factors influencing technological proficiency.

A fundamental theory for comprehending technostress will be the Transactional Model of Stress and Coping by Lazarus and Folkman (1984), which focuses on how people view and react to technology pressures. According to this hypothesis, stress results from people believing they don't have enough resources to meet demands from outside sources, which strains their minds and reduces their productivity. When teachers feel skepticism, exhaustion, anxiety, and inefficiency as a result of the rapid advancements in technology, this is known as technostress. According to Tarafdar et al. (2007), technostress has a detrimental impact on productivity and job satisfaction, which emphasizes the need for methods to enhance digital adaptability. By tackling these issues, teachers will become more techsavvy, which will lower stress levels and improve their capacity to incorporate technology into their lesson plans.

Workload management, as described in Bakker and Demerouti's (2007) Job Demands-Resources (JD-R) model, which explains the relationship clearly draws on the existing body of literature. In this case, it is important to note the theory's other components, such as job demands, which are often forced to work overtime and meet deadlines from their managers, resulting in burnout, and resources which in this case include skill development and organizational support leading to engagement and performance. In the context of education, particularly for teachers, a lack of adequate technological skills in the presence of high workloads will most likely lead to burnout and inefficiency. If, however, teachers are provided with some basic workload management reliefs, such as predefined task assignments, timely execution of tasks, and proper management of one's energy, then there is ample scope for these teachers to enhance their technological proficiency. Both Schaufeli, et al. (2002) reinforces this argument by stating that more productivity and job satisfaction are accompanied with greater vigor, dedication, and absorption in work. Thus, workload management will play a crucial role in equipping educators with the necessary skills to navigate digital tools, improving both their teaching effectiveness and overall wellbeing.

Technostresshad negatively impact proficiency if not managed properly, as psychological barriers hinder the adoption of digital tools. Conversely, effective workload management will create a supportive environment that fosters learning and skill development. Across all domains, their technological proficiency, as observed through the capabilities of teachers to address technostress effectively and to balance their workload is dependent on the handling of work-related stress due to tech by the instructors.

Teaching with new technologies is consistent with TPACK (Mishra and Koehler, 2006) as it speaks to the necessity of technology being integrated in conjunction with pedagogy and content. Technostress and workload management: Teachers who practice teaching with emerging technologies are more likely to seek innovative and effective learning experiences including artificial intelligence/virtual reality/gamification. Connectivism (Siemens, 2005) also focuses on learning through networks and connections (2), a focus on the development of emerging technologies skills. Online resources keep teachers connected and provide them with the opportunity to connect with other educators, experts, and resources to allow technostress- reducing opportunities as well as ongoing practice in new technologies and pedagogical approaches. Accordingly, when you reduce the tech stress and workload Management allows your teachers to achieve significantly high level of technological



competency with every stride towards a better future. It turns them into better role models for classrooms where they will have top of the line knowledge on 21 Century educational tools that will finally snap them out them teaching effectiveness and student outcome

DEPENDENT VARIABLE

Research Paradigm

## INDEPENDENT VARIABLES

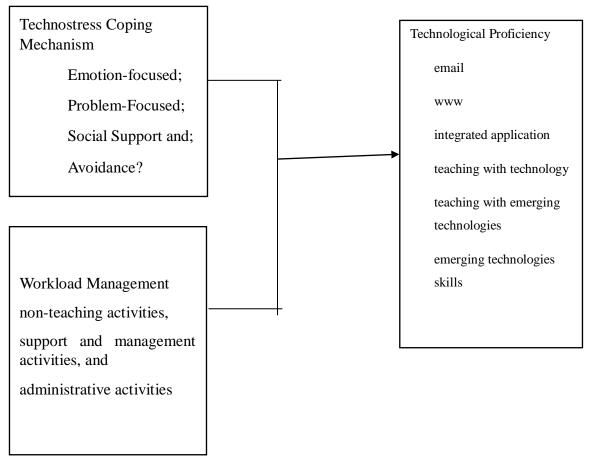


Figure 1. Schematic diagram between the relationship of the technostress coping mechanism, workload management and the technological proficiency.

Hypothesis of the Study

The following null hypotheses was tested at 0.05 level of significance:

Ho1: There is no significant relationship between technostress mechanism and workload management on technological proficiencyamong teachers in the Division of Bukidnon.

Ho2: There is no predictor variable of technological proficiency of the teachers.



#### METHODOLOGY

This chapter presented the methods and procedures employed in the study included the research design, locale of the study, respondents of the study, variables measured and scoring of instruments, data gathering procedure, and the corresponding statistical techniques used in attaining the objectives of the study.

#### Research Design

the research design for this study is descriptive-correlational to specifically determined the technological proficiency of teachers of Division Bukidnon. Both the descriptive piece strived to provide a systematic description of teachers' skills and competencies in terms of their competencies with respect to particular technological tools and applications that corresponded to what teachers did in their profession. Correlational analysis was used to determined relationships among teachers' proficiency with technology and alternative variables, within the context of relationship between those factors. The study combined description with correlation analysis in illustrating the status quo of technological proficiencies and potentially uncovered possible relationships that could serve as basis for strategies in fostering technology integration in teaching.

#### Locale of the study

This study was conducted at San Fernando II of Division of Bukidnon including central schools, integrated schools, and high schools.



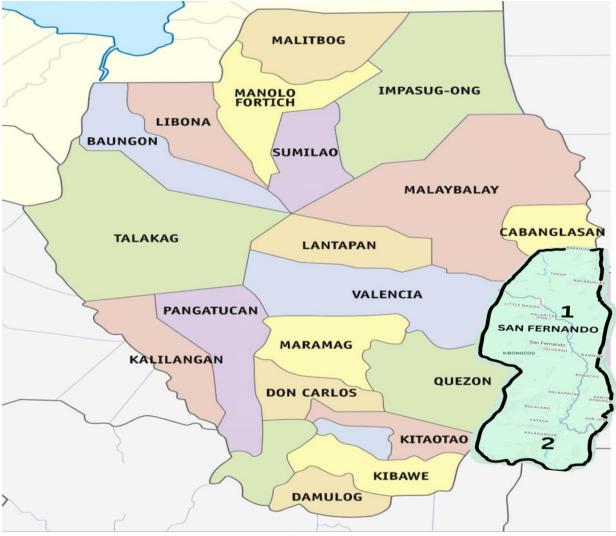


Figure 2. Map of the San Fernando of Bukidnon

## Respondents of the Study

The respondents of the study were 250 teachers randomly selected teachers in the Division of Bukidnon specifically in San Fernando. The random sampling method was used to identify the samples from the population.

#### Research Instrument

The researcher used adapted survey to determine the level of technostress on technological proficiency. The respondents were asked to choose the preferred response based on their perception on the given indicator.

This part of the questionnaire is adapted from the study of Castaňeros, J & Paglinawan, J, (2024)



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The technostressmechanism describes how teachers cope up their stress due to their interaction with technology, impacting their well-being and productivity. According to Castaneros, J &Paglinawan, J, (2024) technostress has four types: emotion-focused coping, problem-focused coping, social support coping and avoidance. The content validity and reliability analysis with Cronbach's alpha of 0.976 was utilized to measure thetechnostress coping mechanismthat the basic education teacher practice.

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00-1.50	Strongly Disagree (SD)	Not Practiced
2	1.51-2.50	Disagree (D)	Less Practiced
3	2.51-3.50	Moderately Agree (MA)	Moderately Practiced
4	3.51-4.50	Agree (A)	Highly Practiced
5	4.51-5.00	Strongly Agree (SA)	Very Highly Practiced

The second part of the questionnaire is Teachers Workload Survey tool is designed by (Walker et al., 2019) and adapted from Molina, M. &Escarlos, G.(2024) with Cronbach Alpha coefficient of 0.93. The evaluation questions was used to assessed workload overload for a structured approach in identifying the key factors contributing to stress and inefficiency. Research by Hakanen, Bakker, and Schaufeli(2006) suggests that excessive workload, combined with emotional and cognitive demands, leads to job strain, which negatively affects teachers' engagement and well-being.

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00-1.50	Rare	Very poorly managed
2	1.51-2.50	Sometimes	Poorly managed
3	2.51-3.50	Often	Moderately managed
4	3.51-4.50	Very Often	Highly managed
5	4.51-5.00	Always	Very highly managed

The last part of the questionnaire is Technology Proficiency Self-Assessment for 21st Century Learning (TPSA C21) developed by Christensen and Knezek (2017) nd adapted to Turkish conditions by Fidan, Debbağ and Çukurbaşı (2020). It was pilot tested with a Cronbach Alpha coefficient of .906 indicating a very highly level of reliability. Respondents rated on a scale of 1-5. With specific range and qualitative interpretation as follows:

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level
3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level
5	4:51 - 5.00	StronglyAgree	Very highly level

## Data Gathering Procedure

In gathering the necessary data, the researcher asked permission from the Schools Division Superintendent of Division of Bukidnon through letter request. The respondents were informed through



a cover letter before they were given questionnaires to answer. Respondents of the study had ample time to answer the questionnaire in order to obtain accurate and valid results.

## Statistical Treatment

The following statistical tools used in the study:

Descriptive statistics such as mean will be employ to ascertain what is the level of technostress mechanism among educators in department of education for Problem 1, What is the level of workload management among educators in Department of Education for problem 2, What is the level of technological proficiency among educators in the department of Education for problem 3, and What relationship exists between technostress mechanism and workload management on technological proficiency of the educators in the Philippines. Correlation analysis was utilized to determine the relationship of the Technostress Mechanism and workload management to technological proficiency.

Linear regression analysis was used to predict teachers' Technological Proficiency.

# PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

## TECHNOSTRESS COPING MECHANISM

#### Emotion-Focused Coping

Table 1 provides a detailed insight of technostress coping mechanisms of teachers focuses on Emotion-Focused Coping. The table includes 8 indicators followed by mean scores accompanied by descriptive rating and qualitative interpretation.

The means score affects every indicator-question, e.g., asking for emotional support (4.19), relaxation techniques (4.17), positive reframing (4.13), and positive self-talk (4.11), all falling into the 'Agree' category, meaning this has been "Highly Practiced". The lowest-rated indicator, journaling or mindfulness practice, still remains 'Highly Practiced.' In support of the respondents' widespread use of emotion-focused coping strategies is the grand mean of 4.06. The data shows that educators in the Bukidnon Division regularly and extensively use more varied emotion-focused coping strategies in dealing with the technological stressors that affect them.

There seems to be a preponderance of evidence among the study respondents in favor of the teachers using emotional-regulation strategies to deal with stresses associated with demands on technology in their work. Indeed, the finding that the teachers were proactive in managing their emotional responses to stress induced by technology is borne out by the consistent high means on all items. Coping techniques that sustain resilience and well-being include self-care, relaxation, positive reframing, and social support. The relatively low mean for journaling and mindfulness may indicate that such techniques are either less frequently practiced or harder to access when compared with other strategies such as confiding in colleagues or engaging in leisure activities.

## Table 1. Level of Technostress Coping Mechanism of Teachers in terms of Emotion-Focused

INDICATOR	Mean	Descriptive	Qualitative
INDICATOR	Ivicali	Rating	Interpretation



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I seek emotional support from colleagues or friends when I feel overwhelmed by technology-related challenges.	4.19	Agree	Highly Practiced
I engage in relaxation techniques (e.g., deep breathing, meditation) to manage stress caused by technology use.	4.17	Agree	Highly Practiced
I try to maintain a positive attitude and outlook when dealing with technology- related stressors.	4.13	Agree	Highly Practiced
I engage in positive self-talk to manage negative emotions associated with technology-related challenges.	4.11	Agree	Highly Practiced
I express my feelings of frustration or stress related to technology use to release tension.	4.04	Agree	Highly Practiced
I engage in hobbies or activities outside of work to unwind and reduce stress caused by technology.	4.03	Agree	Highly Practiced
I practice self-compassion and self-care to alleviate emotional strain caused by technology.	4.03	Agree	Highly Practiced
I engage in activities that promote emotional well-being, such as mindfulness exercises or journaling.	3.82	Agree	Highly Practiced
MEAN	4.06	Agree	Highly Practiced

## LEGEND:

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00-1.50	Strongly Disagree (SD)	Not Practiced
2	1.51-2.50	Disagree (D)	Less Practiced
3	2.51-3.50	Moderately Agree (MA)	Moderately Practiced
4	3.51-4.50	Agree (A)	Highly Practiced
5	4.51-5.00	Strongly Agree (SA)	Very Highly Practiced

The high degree of emotion-focused coping indicates the adaptive strategies that educators have developed to ameliorate the adverse effects accompanying technological stress. This consideration is especially important in light of the technological proficiency being studied concerning workload management and technostress coping mechanism. Use of emotion-focused coping strategies must, to a



large extent, support teachers in being functional and professional, notwithstanding the surrounding difficulties and demands of technology. Regulating emotional responses is one of the paths that will allow teachers to focus more on learning and integrating new digital tools that are fundamental in attaining technological proficiency.

Furthermore, Ragu-Nathan et al. (2008) and Tarafdar et al. (2019) argue that emotionsfocused coping strategies such as relaxation and social support can be useful in curbing technostress and improving well-being. Paglinawan (2023) underlines that emotion-focused coping methods such as techpositive mindset are vital for improving digital skills while pointing out the ongoing struggles that teachers in Bukidnon face concerning institutional support and the training gap. It is also reported that teachers applying emotion-focused coping strategies are in a better position to deal with workload and sustaining technological proficiency (Ayyagari et al., 2011). Therefore, emotional resilience and adaptive coping strategies in teachers can not only buffer against the negative outcomes of technostress but also assist in building technological competence required for effective instruction in the digital age.

## Problem-Focused Coping

Table 2 showed the mean scores, descriptive ratings, and qualitative interpretations of teachers' problem-focused coping mechanisms in managing technology-related stress.

The indicators included collaboration with colleagues (mean = 4.06), doing research to enhance understanding (4.04), using problem-solving strategies (3.94), participation in workshops or conferences (3.92), seeking for technological resources (3.87), breaking complex tasks (3.80), prioritizing workload (3.79), and active search in training opportunities (3.73). All these indicators were ascribed a descriptive rating of "Agree" and were interpreted as "Highly Practiced." This resulted in an overall mean score of 3.89 for problem-focused coping mechanisms, suggesting that this coping strategy is quite broad and consistently practiced by the teachers.

INDICATOR	Mean	Descriptive Rating	Qualitative Interpretation
I collaborate with colleagues to brainstorm innovative solutions to technology-related problems.	4.06	Agree	Highly Practiced
I conduct research and gather information to enhance my understanding of technology- related topics.	4.04	Agree	Highly Practiced
I engage in problem-solving strategies to find solutions to technology-related issues.	3.94	Agree	Highly Practiced
I actively participate in technology-focused workshops or conferences to gain new insights and strategies.	3.92	Agree	Highly Practiced
I seek out technological resources and tools that can help me overcome specific	3.87	Agree	Highly Practiced



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challenges.			
I break down complex technology-related tasks into smaller, manageable steps to alleviate stress.	3.80	Agree	Highly Practiced
I prioritize and organize my workload to better manage technology-related challenges.	3.79	Agree	Highly Practiced
I actively seek out training and professional development opportunities to improve my technological skills.	3.73	Agree	Highly Practiced
Overall Mean	3.89	Agree	Highly Practiced

Table 2. Level of Technostress Coping Mechanism of Teachers in terms of Problem-Focused Coping

LEGEND:

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00-1.50	Strongly Disagree (SD)	Not Practiced
2	1.51-2.50	Disagree (D)	Less Practiced
3	2.51-3.50	Moderately Agree (MA)	Moderately Practiced
4	3.51-4.50	Agree (A)	Highly Practiced
5	4.51-5.00	Strongly Agree (SA)	Very Highly Practiced

The data indicate teachers actively adopting problem-focused coping strategies in combating technostress. The most highly rated activities comprise collaboration and research and emphasize that teachers prefer collective problem-solving and self-directed learning to address problems with technology. Participation in professional development and task management are marginally lower in practice but still employed widely. The consistency in agreement of these indicators suggests that teachers not only understand the importance of problem-focused coping but, more so, apply a number of operational actions intended for the management of technology-related problems. Overall, though with a slightly lower mean of 3.89 than the emotion-focused coping mean of 4.06, the metric refers to a fairly consistent practice of active, solutions-oriented behaviors.

It implies that teachers are proactive and constructive in taking action with regard to technostress. Technological knowledge and experiences were acquired by the teachers through collaboration with colleagues, by conducting research, or through attendance at workshops. Their confidence and competence with respect to technology are likely to improve through such learning. Further exemplifying a strategic determination of handling the stressors was breaking down complicated tasks and organizing workloads, which facilitate more efficient functioning under the technology demands. The focused coping practices are specific because they target the very source of stress-which are the technological challenges and give teachers tools to better their skills in the technologies.



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Accordingly, Tarafdar et al. (2019) stated that problem-focused strategies such as seeking information and skill development countered much negative impact of stress related to technology. Ragu-Nathan et al. (2008) also reported that active problem-solving and professional development had better performance outcome and less technostress among school educators. Moreover, Paglinawan (2023) also considered the workload management and continuous learning when talking about the adaptation to the technological changes most specially by the school teachers. Similarly, Ayyagari et al. (2011) found that teachers who practice problem-focused coping tend to be more technologically proficient and more satisfied with their jobs. All these studies would lend credence to the present data in demonstrating problem-focused coping mechanisms as very much needed by teachers in dealing with technostress and applying technology use in their professional roles effectively.

#### Social Support Coping

Table 3 shows the mean scores, descriptive ratings, and qualitative interpretation of the social support coping mechanisms put in place by teachers to mitigate technostress.

Table 3:Level of Technostress Coping Mechanism of Teachers in terms of Social Support Coping

		Descriptiv	Qualitative
INDICATOR	Mean	e Rating	Interpretation
I seek guidance and support from technology coaches or experts when faced with technological difficulties.	4.22	Agree	Highly Practiced
I engage in peer mentoring or coaching to enhance my technological skills and coping strategies.	4.17	Agree	Highly Practiced
I reach out to administrators or supervisors for guidance and support in managing technology- related challenges.	4.17	Agree	Highly Practiced
I actively participate in professional learning communities focused on technology integration.	4.16	Agree	Highly Practiced
I participate in online forums or communities to seek advice and support from other educators.	4.13	Agree	Highly Practiced
I collaborate with other teachers to share ideas and strategies for managing technology-related stress.	4.12	Agree	Highly Practiced
I establish and maintain professional relationships with peers who can provide guidance on technology use.	4.11	Agree	Highly Practiced
I discuss technology-related challenges with colleagues to gain insights and suggestions.	4.10	Agree	Highly Practiced
Overall Mean	4.15	Agree	Highly Practiced



Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00-1.50	Strongly Disagree (SD)	Not Practiced
2	1.51-2.50	Disagree (D)	Less Practiced
3	2.51-3.50	Moderately Agree (MA)	Moderately Practiced
4	3.51-4.50	Agree (A)	Highly Practiced
5	4.51-5.00	Strongly Agree (SA)	Very Highly Practiced

## LEGEND:

The item with the highest score was guidance and support from technology coaches and experts when facing technological challenges, with a mean score of 4.22. Activities that fell close in scoring and were termed similar descriptors were peer mentoring or coaching (4.17) and support from administrators or supervisors (4.17), as well as participation in professional learning communities with a technology integration focus (4.16). Participation in online forums scored well (4.13), along with collaborating with other teachers (4.12), establishing professional relationships with peers (4.11), and engaging in discussions with colleagues about technology-related challenges (4.10). The tally of mean social support coping mechanisms is rated overall at 4.15, which falls under the descriptive rating of "Agree," with a quantitative interpretation as "Highly Practiced."

It indicates that teachers in the Division of Bukidnon highly depend on social support mechanisms to relieve technostress. Since very high means for all indicators show us that teachers are in search of support from others and prefer to go for it as the best option in overcoming technology-associated problems, the highest mean for seeking expert support at 4.22 indicates the paramount importance with which teachers regard having expert assistance handling technology-related problems. High attendance in professional learning communities and participation in peer mentoring is an indication of a culture in which sharing knowledge and supporting each other comes first. The small variance in mean scores (4.10-4.22) is a good indication of a generally high engagement in social support activities.

This implies that social-support coping skills are an important resource that teachers use to deal with technostress. Teachers help themselves when they search for expert guidance, engage in peer mentoring, and collaborate with colleagues in an environment aimed at lifting their skills to resolve immediate technological difficulties and increase their general technological skill level. This social dimension likely softens the sense of isolation and stress, and serves to bolster a more positive attitude toward the use of technology. In regard to the independent variables of technostress coping mechanism and workload management and technological proficiency as the dependent variable, social support coping is considered to be undertaking a high level of practice. Therefore, it suggests that such collaborative and community-centred strategies must play a good calibration in enhancing teachers 'technology skills and confidence. Besides, it could serve as a means of dealing with the workload by alleviating technological challenges in a supportive atmosphere.

Recognizing the importance of social support from colleagues and supervisors in mitigating technostress among educators thereby increasing their job satisfactionRagu-Nathan et al. (2008). Also,



Tarafdar et al. (2019) further assert that professional learning communities and peer mentoring serve extremely well in developing technological competence and resilience. Paglinawan (2023) subsequently pointed out that institutional support and collaborative learning environments help teachers cope completely in the rapidly changing technological landscape. Besides, Ayyagari et al. (2011) put forth evidence that teachers engaging in social support coping display increased levels of technological self-efficacy and lowered levels of burnout. These studies further support the current findings asserting that social support is essential in helping teachers cope and develop technological skills and general well-being.

## Avoidance

Table 4 shows the mean values of indicators, descriptive ratings, and qualitative interpretations were made regarding the teachers' various coping strategies in technostress, especially those in the avoidance category.

The highest-rated indicator is setting technology limits to avoid overload (mean score of 4.13). This was followed closely by other indicators: taking time away from technology to relax and engage in a hobby (4.06), prioritizing activities unrelated to technology (3.99), and lessening exposure to technology after work hours to achieve a healthy work-life balance (3.98). Certain other strategy indicators such as engaging in sports (3.96), delegating tech-related work (3.94), avoiding stressful tech (3.92), and unplugging (3.89) were all very close to 4. The overall mean value for avoidance coping is 3.98, categorized as Agree and Qualitatively interpreted as Highly Practiced.

		Descriptiv	Qualitative
INDICATOR	Mean	e Rating	Interpretation
I set boundaries on technology use to prevent it from becoming overwhelming.	4.13	Agree	Highly Practiced
I engage in hobbies or activities that do not involve technology to disconnect and relax.	4.06	Agree	Highly Practiced
I prioritize nontechnology-related tasks to reduce reliance on technology and associated stress.	3.99	Agree	Highly Practiced
I limit my exposure to technology after work hours to maintain a healthy work-life balance.	3.98	Agree	Highly Practiced
I engage in physical activities or exercise to distract myself from technology-related stress.	3.96	Agree	Highly Practiced
I delegate technology-related tasks to others when possible to alleviate my own stress.	3.94	Agree	Highly Practiced
I avoid using certain technologies or tools that I find particularly stressful or challenging.	3.92	Agree	Highly Practiced
I take breaks from using technology to give myself time to recharge and reduce stress.	3.89	Agree	Highly Practiced
Overall Mean	3.98	Agree	Highly Practiced

LEGEND:



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Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00-1.50	Strongly Disagree (SD)	Not Practiced
2	1.51-2.50	Disagree (D)	Less Practiced
3	2.51-3.50	Moderately Agree (MA)	Moderately Practiced
4	3.51-4.50	Agree (A)	Highly Practiced
5	4.51-5.00	Strongly Agree (SA)	Very Highly Practiced

The data show that teachers in the Division of Bukidnon apply avoidance strategies regularly to cope with technostress. The highest score for avoidance strategies-setting boundaries on technology use (4.13)-tells us that teachers are aware that they need to regulate their interaction with technology to avoid overload. Engaging in hobbies that take them away from technology and prioritizing tasks that will not use any technology speak of deliberate efforts by the teachers to lessen their dependency on technology and relieve stress. The relatively consistent means across all indicators of avoidance (ranging from 3.89 to 4.13) clarify that teachers have actually been using a range of avoidance strategies in their coping files throughout.

Such results would imply that avoidance coping is an important means by which teachers maintain a balance and protect their well-being from the demands of technology use. Such boundaries allow teachers freedom to recharge mentally and physically. This is very important, as it prevents teacher burnout and encourages sustained engagement in a working environment mediated through technology. Such avoidance strategies as delegation and breaks from technology would similarly ease immediate tensions and allow for a more satisfied teacher to better deal with workload. In the context of the study where the ability to cope with technostress or manage workload influences technological proficiency, avoidance coping indirectly maintains this proficiency by preserving emotional and physical resources among teachers. However, since avoidance does not directly tackle technological issues, it is most effective when practiced hand in hand by active strategies, such as social support and problem-focused coping.

Avoidance coping in managing technostress is being supported by other literature. According to Ragu-Nathan et al. (2008), technology boundaries should help maintain work-life balance against burnout, particularly for the teaching profession. Tarafdar et al. (2019) state that disengagement and taking breaks from technology can ease adverse psychosocial impacts of technostress. In turn, Paglinawan (2023) further notes that teachers who balance technology use with non-technology activities enjoy better emotional wellness and sustained motivation. In this context, Ayyagari et al. (2011) rightly warn that while avoidance coping reduces short-term stress, it must be combined with active coping in order to preserve technological competence and real professional development. Collectively, these studies argue that avoidance coping is a critical part of a holistic approach to managing technostress that enables teachers to engage with technological competence and to carry out effective workload management.

## THE OVERALL TECHNOSTRESS COPING MECHANISM OF THE TEACHERS

Table 5 summarizes the overall technostress coping mechanisms employed by teachers in the Division of Bukidnon combining the mean scores of emotion-focused coping, problem focused coping, social support coping and avoidance.



_		Descriptive	Qualitative
INDICATOR	Mean	Rating	•
INDICATOR	Iviean	Katilig	Interpretation
Emotion-Focused Coping			Highly
Enotion-Pocused Coping	4.06	Agree	Practiced
Problem Focused			Highly
Fioblem Focused	3.89	Agree	Practiced
Social Support Coping			Highly
Social Support Coping	4.15	Agree	Practiced
Avoidance			Highly
Avoidance	3.98	Agree	Practiced
OVERALL MEAN	4.02	Agree	Highly
OVERALL MEAN	4.02	Agree	Practiced

# LEGEND:

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00-1.50	Strongly Disagree (SD)	Not Practiced
2	1.51-2.50	Disagree (D)	Less Practiced
3	2.51-3.50	Moderately Agree (MA)	Moderately Practiced
4	3.51-4.50	Agree (A)	Highly Practiced
5	4.51-5.00	Strongly Agree (SA)	Very Highly Practiced

Teachers seem to have the highest practice of different coping strategies around four main categories: Emotion-Focused Coping (4.06 mean), Problem-Focused Coping (3.89 mean), Social Support Coping (4.15 mean), and Avoidance Coping (3.98 mean). In all instances, it has a descriptive rating of "Agree, " which indicates qualitative interpretation as "Highly Practiced." Overall average score on all mechanisms combined is 4.02, indicating that teachers generally agree that them using these strategies acts on technostress.

Data analysis reveals that Social Support Coping is the most highly practiced way (mean=4.15), followed by Emotion-Focused Coping (4.06), Avoidance (3.98), and Problem-Focused Coping (3.89). The relatively high mean scores under all categories suggest multifaceted modes of coping that teachers adopt in managing technostress, ranging from emotional regulation, to active problem-solving, social collaboration, and strategic disengagement. The mean overall score of 4.02 confirms further that copings with technostress's are indeed well-practiced and maintain consistency among teachers.

It implies that teachers in the Division of Bukidnon use a balanced and comprehensive kind of coping mechanism to address the challenges of technology within their working environment. The fact that social support coping had the highest scores indicates an important role of the collaborative networks, mentorships, and support systems within institutions to help teachers cope with problems of technology. Emotion-focused coping involves attempts of teachers to regulate emotional reactions and maintain psychological well-being, which are prerequisites for their sustained commitment to motivation. Avoidance coping serves as an avenue of protection against burnout and ensures a person's



work-life balance remains intact, while problem-focused coping reflects teachers' proactive disposition to fix technological problems and upgrade their competencies.

According to Ragu-Nathan et al. (2008), social support and emotion-focused coping have such effectiveness in helping reduce technostress among teachers and increase their job satisfaction. Tarafdar et al. (2019) state that the combination of problem-focused and emotion-focused strategies serves well in managing stress related to technology and developing competence in it. Paglinawan (2023) discovers that workload management and emotional resilience are essential elements in adapting to technological changes in teachers. It was also found by Ayyagari et al. (2011) that teachers using a variety of coping mechanisms become more proficient technology users while also experiencing lower burnout levels.

#### WORKLOAD MANAGEMENT

#### Non- Teaching Activities

Table 6 indicate that teachers in the Division of Bukidnon very often and to a high degree manage quite a number of non-teaching activities.

These activities include general administrative work, communication, and cooperation with parents or guardians, participation in school management, teamwork with colleagues, student counseling, extracurricular activities engagement, and individual lesson planning or preparation. With respect to mean scores, the indicators range from 3.84 to 4.20 for an overall mean of 4.07, indicating that teachers manage these responsibilities with considerable consistency and efficacy. Among the types of general administrative works, talks and communications with parents or guardians seem to be given the burden of management as one of the most common, and this goes slightly lower for individual lesson planning, which is highly regarded and has almost the same amount of time given to it in scores.

INDICATOR	Mean	Descriptive	Qualitative
	Mean	Rating	Interpretation
General administrative work	4.20	Very Often	Highly Managed
Communication and cooperation with parents or guardian	4.19	Very Often	Highly Managed
Participation in school management.	4.13	Very Often	Highly Managed
Teamwork and dialogue with colleagues within this school.	4.08	Very Often	Highly Managed
Student counseling	4.05	Very Often	Highly Managed
Engaging extracurricular activities	4.05	Very Often	Highly Managed
Individual planning or preparation of lessons either at school or out	5.84	Very Often	Highly Managed

Table 6: Level of Workload management of teachers' in terms of Non-Teaching Activities



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of school.			
OVERALL MEAN	4.07	Very Ofte	en Highly Managed

LEGEND

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00-1.50	Rare	Very poorly managed
2	1.51-2.50	Sometimes	Poorly managed
3	2.51-3.50	Often	Moderately managed
4	3.51-4.50	Very Often	Highly managed
5	4.51-5.00	Always	Very highly managed

These activities include general administrative work, communication, and cooperation with parents or guardians, participation in school management, teamwork with colleagues, student counseling, extracurricular activities engagement, and individual lesson planning or preparation. With respect to mean scores, the indicators range from 3.84 to 4.20 for an overall mean of 4.07, indicating that teachers manage these responsibilities with considerable consistency and efficacy. Among the types of general administrative works, talks and communications with parents or guardians seem to be given the burden of management as one of the most common, and this goes slightly lower for individual lesson planning, which is highly regarded and has almost the same amount of time given to it in scores.

This means, based on the views of the teachers, that they not only worry about their duty as a facilitator but also actively take part in and manage some non-teaching duties that are important to the running of the school community. The high mean scores on all indicators suggest that the teachers are well organized and professionally committed to balancing such diverse responsibilities. Well-balanced workload management must also minimize stress and burnout and enable the teachers to concentrate more on classroom work and professional development in the use of technology.

The highest mean scores imply that the teachers are well organized and possess the best professional commitment toward balancing such diverse responsibilities. Proper workload management should also alleviate stress and keep the teachers from burning out, allowing the teachers to put in more time and energy on teaching activities and professional development on technological competence.

According to Molina &Escarlos (2024) the effective management of non-teaching and administrative workloads was significantly correlated with lower attrition and higher organizational commitment. This signifies that, to ensure quality education and foster technological adaptation, management of workload becomes a pillar for protecting the motivation and stability of the teaching force. Likewise, Kim (2019) stressed that teachers who carry out their workload management well will experience less stress and are thus more likely to take part in professional development activities in technology integration. Pacaol (2021) stated that by reducing workload pressures, teachers opened space for enhancing their technological skills.

#### Support and Management Activities



Table 7 presents the workload management of teachers with respect to support and management activities in their schools.

The averages of the different indicators ranged from 3.72 to 4.11, with a mean value of 3.91. Teachers reported very often and highly managing tasks that included organizing resources and premises, setting up and cleaning vagaries (mean = 4.11), appraising, monitoring, coaching, mentoring, and training other teaching staff (3.95), attending staff meetings (3.94), and contacting people or organizations outside the school apart from parents (3.91). Other responsibilities such as timetabled tutor time or remediation (3.83), and providing non-regular teaching cover for absent colleagues within the school day (3.72) were also very often and highly managed.

Table 7: Level of Workload management of teachers' in terms of Support and Management Activities

INDICATOR	Mean	Descriptive Rating	Qualitative Interpretation
Organizing resources and premise setting up and tidying classroom	s, 4.11	Very Often	Highly Managed
Appraising, monitoring, coaching mentoring, and training other teaching staff.		Very Often	Highly Managed
Staff Meeting	3.94	Very Often	Highly Managed
Contact with people or organization outside the school other than parents.	on 3.91	Very Often	Highly Managed
Timetabled tutor timer/remediation	3.83	Very Often	Highly Managed
Non-regular teaching cover for absence colleagues within school's timetabled da	2 7 2	Very Often	Highly Managed
Overall	3.91	Very Often	Highly Managed

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00-1.50	Rare	Very poorly managed
2	1.51-2.50	Sometimes	Poorly managed
3	2.51-3.50	Often	Moderately managed
4	3.51-4.50	Very Often	Highly managed
5	4.51-5.00	Always	Very highly managed

# LEGEND

It indicates that teachers actively engage in a large number of support and management roles apart from direct instruction duties. The very high mean of organizing resources and classroom management shows that teachers take responsibility for creating and sustaining an effective learning



environment. Being significantly involved in mentoring and training his pairs, along with participation in staff meetings, shows the collaborative and leadership culture of the teachers themselves. Although the means here are slightly lower for tutoring and covering for absent colleagues, they still show a consistent and significant engagement in these support activities.

Workload management being one of the coping mechanisms to deal with technostress in improving technological capacity, it is thus conceivable that good management of support and administrative tasks is simply vital for teachers to acquire balance and keep focus on their primary teachings. Working on such unconstructive chores super efficiently will allow teachers to have reduced stress on a cognitive level, which in turn allows them space for coping with technostress and increasing their standing as far as technological expertise is concerned. This seems to reveal that workload management in support and management activities is thus indirectly assisting with picking up and using technology wisely into teachers' transfer practices.

Supporting this conclusion are the findings of Molina and Escarlos (2024), assert that systemic workload management covering support and administrative tasks keeps teachers in good health and spiritually committed to the organization. Their research indicates that teachers who manage such responsibilities well face lower levels of burnout and engage more in their professional development, which includes training on technology-related matters. Likewise, Kim (2019) underscored that teachers' participation in collaborative and mentoring roles supports a professional environment conducive to the learning and uptake of new technologies. Similarly, Pacaol (2021) found that teachers who balance their workload, including support activities, report being highly satisfied with their work and are more open to innovation in teaching methods, one being technology integration. Collectively, these studies emphasize the significance of effective management of support and management as part of a comprehensive workload management approach that advances teachers' technological proficiency and, more importantly, their teaching efficaciousness.

## Administrative Activities

Table 8 illustrates the management of teachers' workloads with respect to administrative activities.

The means for the indicators range from 3.72 to 3.91, with an overall mean of 3.84. Teachers indicated that recording, inputting, monitoring, and analyzing data regarding student performance (mean = 3.91), planning, conducting, and reporting on pupil assessments (3.89), and school policy development and financial planning (3.72) are activities that were very often and are highly managed by them. All of these activities were described as having the descriptors "Very Often" and "Highly Managed."

INDICATOR	Mean	Descriptive Rating	Qualitative Interpretation
Recording, inputting, monitoring, and analyzing data in relation to student's performance and for others	3.91	Very Often	Highly Managed
Planning, administering and	3.89	Very Often	Highly

Table 8: Level of Workload management of teachers' in terms Administrative Activities



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reporting and reporting on pupils assessment.			Managed
School Policy development and financial Planning	3.72	Very Often	Highly Managed
Overall	3.84	Very Often	Highly Managed

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00-1.50	Rare	Very poorly managed
2	1.51-2.50	Sometimes	Poorly managed
3	2.51-3.50	Often	Moderately managed
4	3.51-4.50	Very Often	Highly managed
5	4.51-5.00	Always	Very highly managed

#### LEGEND

It is clear that teachers frequently have to carry out a few administrative tasks that are very important for the operational running of the school and accountability. The mean rating exemplifies a greater emphasis on data-aligned tasks, thereby implying that utmost priority is given to monitoring and analysis of student performance that becomes the basis for instructional decisions. Assessments planning and reporting also deserved extensive attention, signifying teachers' commitment to the evaluation and support of student learning outcomes. Policy development at the school level and financial planning obtain a bit lower mean, yet they still maintain the status of highly managed activities with teachers' involvement in larger organizational and fiscal concerns.

Looking at these results in relation to the study in which workload management and technostresscoping mechanisms are independent variables within the model that determine technological proficiency, it could then be inferred that efficient management of administrative tasks would be among key factors affecting teachers' overall balance of workload. Competent handling of these administrative burdens would, in all probability, alleviate stress, making available time and mental resources needed by teachers to devote themselves to technology and improve their technological proficiency. The complexity and time-consuming tasks being managed assume the teachers' organizational ability and adaptability needed for coping with technostress and for incorporating technology into their teaching activities.

This was similarly supported by the findings of Molina and Escarlos (2024), wherein efficacious workload management, particularly the administrative duties, is one key factor to varying degrees of teacher burnout and organizational commitment. Their findings indicate that teachers who successfully manage their administrative workload tend to be more active in professional development, including technology-related forums. Likewise, Kim (2019) maintained that teachers' ability in managing administrative workload provides conditions that are enabling for continuous professional learning and technology integration. In a related study, Pacaol (2021) found that teachers who balance administrative workload perform with greater job satisfaction and openness towards newer approaches in instructional



strategies, particularly in tech-integrated learning. The findings of these studies support the argument that effective management of administrative workload is one major avenue into promoting teachers' technological proficiency and general effectiveness.

# THE OVERALL WORKLOAD MANAGEMENT OF TEACHERS

The mean scores show that teachers manage Non-Teaching Activities very often and highly (mean = 4.07), the Support and Management Activities (mean = 3.91), and the Administrative Activities to about (mean = 3.84). The total average workload management score of 3.94 "Very Often" and "Highly Managed" in a qualitative interpretation.

		Descriptives	Ovelitetive
INDICATOR	Mean	Descriptive	Qualitative
	1,10ull	Rating	Interpretation
Non-Teaching	4.07	N. OG	
Activities	4.07	Very Often	Highly Managed
Support and	3.91	Very Often	Highly Managed
Management Activities	5.71		
Administrative	2.04		
Activities	3.84	Very Often	Highly Managed
Overall	3.94	Often	Moderately managed
o vorum	5.71	Onon	managed

Table 9: Teachers' overall Workload Management

LEGEND

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00-1.50	Rare	Very poorly managed
2	1.51-2.50	Sometimes	Poorly managed
3	2.51-3.50	Often	Moderately managed
4	3.51-4.50	Very Often	Highly managed
5	4.51-5.00	Always	Very highly managed

This means that teachers report high management levels in specific workload domains such as non-teaching, support, and administrative activities with means of between 3.84 and 4.07. They suggest that the teachers engage in organizing these responsibilities pretty regularly. The overall workload management mean is 3.94, implying that when all workload factors are combined, teachers think of them as highly managed. This difference must stem from the total burden of combining multiple roles and responsibilities, which influences perceptions of workload management.

It means that when managing workload categories stand-alone, teachers could effectively do so with a high frequency and a lot of efficiency, but the combination of workloads may still not be optimally manageable. Moderately managed overall workload seemed to indicate that the non-teaching, supportive, and administrative responsibilities combined may cause clutter or strain on the workload



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view. Within the realm of this study, workload management and technostress coping mechanisms act as independent variables influencing proficiency with technology. Therefore, the moderate overall workload management might serve as a detriment to full engagement and development in their technological abilities. Effective workload management is paramount in reducing stress and releasing cognitive resources that allow teachers to focus on professional development and technology integration. Thus, increasing technological competence and job effectiveness among teachers call for managing all cumulative demands of the workload.

Molina and Escarlos (2024) support these results by saying that, given citizenship and retention, instructors will still be overwhelmed by an overall workload even if they can control some particular aspects of their job. Their research underlined the importance of holistic approaches to control workloads to guarantee the well-being and professional development of teachers. Kim (2019) claims too much work also causes weariness. This study claims that stress might come from partial management of workload, which causes teachers to shun involvement in professional development particularly those related to technology. Pacaol (2021) claims that for teacher performance and willingness to embrace creative instructional technologies, balanced task management across all areas still remains crucial as well. These combined research show that for best technical competence and teaching performance, a thorough workload management strategy-one in which full teachers' duties are considered is feasible.

## TECHNOLOGICAL PROFICIENCY

# <u>Email</u>

Table 10 shows teachers' independent technological competency in sending emails. Parameters measured include confidence in subscribing to discussion lists, sending emails to their friends, attaching documents, creating distribution lists, andkeeping outgoing messages. All of these received a mean score ranging from 3.93 to 4.09. The descriptors made it score an "Agree", and the qualitative interpretations were "Highly Level." The total mean score of 4.00 indicates that teachers in a study who rate high in email use are also highly competent in using technology.

Table 10: Level of Technological Proficiency of Teachers in terms of sending emails

INDICATOR	Mea	Descripti	Qualitative
INDICATOR	n	ve Rating	Interpretation
I feel confident that I could			
subscribe to a discussion list	4.09	Agree	Highly Level
send e-mail to a friend.	4.07	Agree	Highly Level
send a document as an attachment to an e-mail message.	3.95	Agree	Highly Level
create a distribution list" to send e- mail to several people at once	3.94	Agree	Highly Level
keep copies of outgoing messages that I send to others.	3.93	Agree	Highly Level

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Overall	4.00	Agree	Highly Level

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level
3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level
5	4:51 - 5.00	StronglyAgree	Very highly level

# LEGEND

It shows that a considerable number of the teachers appear to register a confidence level in email-related technologies, with all indicators getting a score of nearly 3.9 or better on a five-point scale by which they were rated. The highest confidence appears to be in subscribing to discussion lists (4.09), indicating that teachers seem comfortable in engaging with collaborative- or community-based digital communications. Friends sending emails (4.07) and attaching documents (3.95) were also scored highly, implying that teachers exhibit competent executing basic to intermediate email features that are crucial for professional and personal communication.

Creating distribution lists (3.94) and keeping copies of outgoing messages (3.93) also have high scores, indicating that teachers manage emails more effectively in situations that require sending to more than one recipient or record-keeping for accountability. The overall mean of 4.00 indicates that teachers indeed have a very high level of technological competence regarding email communication, that is, adequate for effective digital communication in education.

A high proficiency level implies that teachers would be more prepared to use email as a communication, collaborative, and information distribution tool. This proficiency allows them to participate in professional learning communities, coordination with colleagues, and communication with students and parents. It indicates readiness for an advanced level of technology integration into teaching.

These discoveries are consistent with those of Christensen and Knezek (2017), who validated the Technology Proficiency Self-Assessment Questionnaire for 21st Century Learning (TPSA C-21). Their research showed that teachers who rate themselves high on technology proficiency tend to have better integration of digital tools in their instructional practice. Proficiency in communication technologies like email is the foundation in the competencies required by 21st-century learners such as collaborating, communicating, and digital citizenship. Christensen and Knezek (2017), in general, teachers' confidence in using technology is a good predictor of their readiness to adopt and integrate new technologies in their classrooms. This has been associated with increased student engagement and improved outcomes. Based on the high proficiencies in email usability as found in this study, teachers might be inclined to be open to more technological innovations and digital pedagogy.

## WWW

Table 11 shows teachers' self-evaluated technical skills based on their ability to browse through the World Wide Web. They indicated on the following features: searching for specific websites (e.g. Smithsonian Institution), managing visited websites using bookmarks, creating personal web pages,



search engine use for subject-related contents, and finding primary sources for their teaching. From the mean scores of 3.71 to 4.05, all of the descriptive ratings are "Agree," and interpretations are "Highly Level." The overall mean score is 3.86, suggesting that there is a high proficiency in web browsing skills.

# Table 11: Level of Technological Proficiency of Teachers in terms of browsing the World Wide Web (WWW)

INDICATOR	Mean	Descriptiv e Rating	Qualitative Interpretatio n
.search for and find the Smithsonian Institution Web site.	4.05	Agree	Highly Level
keep track of Web sites I have visited so that I can return to them later. (An example is using bookmarks.)	3.88	Agree	Highly Level
.create my own web page.	3.87	Agree	Highly Level
Use an Internet search engine (e.g., Google) to find Web pages related to my subject matter interests.	3.80	Agree	Highly Level
find primary sources of information on the Internet that I can use in my teaching.	3.71	Agree	Highly Level
Overall	3.86	Agree	Highly Level

## LEGEND

Scale	Range	DescriptiveRating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level
3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level
5	4:51 - 5.00	StronglyAgree	Very highly level

The findings suggest that teachers are assured in their ability and indeed depend on being able to utilize the technologies afforded by the Internet mostly for educational benefit. Their highest mean proficiency is above average when it comes to locating a specific website, the Smithsonian Institution, which has a mean of 4.05, indicating above-average target skills in searching web sites. However, one can conclude the ability to manage visited sites through bookmarks (mean of 3.88), and creating personal web pages (mean of 3.87) are also impressive indicators to reflect skills at web navigation and content creation. High skills in browsing the WWW by teachers enhance their access to, judge, and use



online resources effectively, which are vital in learning in the 21st century. This skill will enable them to enrich their learning materials, keep up with new information, and promote digital literacy among students.

This relates to the general or more encompassing understanding of the technology proficiency in teaching. Saad and Sankaran (2020) explain that technology proficiency involves using a digital tool for purposes of communicating, organizing, and enhancing learning, including effective web navigation and management of resources. It is for this reason that a teacher possessing these skills may be able to see improved teaching practices that make instruction more efficient and engaging for students.

# Integrated Application

Teachers assess themselves on Table 12 relating to their integrated application technological proficiency.

Table 12: Level of Technological Proficiency of Teachers in terms of Integrated Application

INDICATOR	ATOR Mean Descriptive Rating		Qualitative Interpretatio n
create a newsletter with graphics.	4.14	Agree	Highly Level
create a database of information about important authors in a subject matter field.	4.02	Agree	Highly Level
use the computer to create a slideshow presentation.	4.01	Agree	Highly Level
Use a spreadsheet to create a bar graph of the proportions of the different colors of M&Ms in a bag.	3.98	Agree	Highly Level
save documents in formats so that others can read them if they have different word processing programs (eg., saving Word, pdf, RTF, or text).	3.86	.86 Agree Highly Level	
Overall	4.00 Agree		Highly Level

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level
3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level



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5	4:51 - 5.00	Strongly Agree	Very highly level
LEG	END		

Integrated applications are defined as using assorted software tools for teaching and communication purposes. Such indicators include the ability to create newsletters with graphics, databases of subject-based information, slideshow presentations, spreadsheets for the visualization of data, and saving documents in various formats for compatibility. The mean scores ranged from 3.86 to 4.14 with all descriptive ratings as "Agree" and qualitative interpretations as "Highly Level." The overall mean score is 4.00 as indicative of a highly proficient level of integrated application use. Data imply that teachers are highly qualified in the place of integrated applications-a mixture of various tech skills for purposes of their instruction and communication. The most distinguished proficiency is associated with the creation of newsletters with graphics (4.14). It demonstrates the strength of skills in combining text and visuals for effective communication.

Integrated applications are defined as using assorted software tools for teaching and communication purposes. Such indicators include the ability to create newsletters with graphics, databases of subject-based information, slideshow presentations, spreadsheets for the visualization of data, and saving documents in various formats for compatibility. The mean scores ranged from 3.86 to 4.14 with all descriptive ratings as "Agree" and qualitative interpretations as "Highly Level." The overall mean score is 4.00 as indicative of a highly proficient level of integrated application use.Data imply that teachers are highly qualified in the place of integrated applications-a mixture of various tech skills for purposes of their instruction and communication. The most distinguished proficiency is associated with the creation of newsletters with graphics (4.14). It demonstrates the strength of skills in combining text and visuals for effective communication.

Creating databases of important authors (4.02) and slideshow presentations (4.01) displays teachers' competence for organizing and presenting information digitally that are necessary to curriculum development and classroom instruction. Using spreadsheets to create bar graphs (3.98) indicates that the teachers can interpret and visualize their data-an important skill in content comprises quantitative information. Saving documents in multiple formats (3.86) indicates an awareness of the compatibility and sharing issues relevant to cooperative work in resource diffusion or dissemination. The overall average of 4.00 suggests that teachers are sufficiently prepared for integrating applications of different software into their teaching, thus improving the effect of teaching and learning with multimedia and data-driven methods.

That proficiency in integrated applications tells that teachers are well off in manipulating technology to furnish diverse instructional materials, back data analysis, and be in touch effectively with students and colleagues. This is otherwise the bedrock for interactive learning environments, learner-centered teaching, differentiated instruction, and inculcation of digital literacy among students.



The study by Ertmer and Ottenbreit-Leftwich (2010) also contains evidence that the confidence and skills of teachers in the use of integrated tools of technology have significant influence on the practices they adopt in teaching and willingness to innovate. Skills in developing multimedia content and managing digital data provide support to active learning strategies and improve student engagement.

#### Teaching with Technology

The proficiency of teachers in teaching with technology is presented in Table 13 across five measures: writing an essay on technology use in the classroom, developing lessons that incorporate subject matter-specific software, describing the software or apps to be used in teaching, planning a budget for technology, and collaborating with distant teachers or students through technology. The means are from 3.75 to 4.09; all indicators are rated "agree" and interpreted as "highly level" proficiency. The overall mean is 3.91, showing that teachers believe that they are high level proficient users of technology in their teaching practice.

Table 13:Level of Technological Proficiency of Teachers interms of Teaching with Technology

INDICATOR	Mean	Descriptive Rating	Qualitative Interpretatio n
write an essay describing how I would use technology in my classroom	4.09	Agree	Highly Level
create a lesson or unit that incorporates subject matter software as an integral part.	4.09	Agree	Highly Level
describe 5 software programs or apps that I would 1 2 3 4 5 use in my teaching.	3.82	Agree	Highly Level
write a plan with a budget to buy technology for my classroom.	3.78	Agree	Highly Level
use technology to collaborate with teachers or students who are distant from my classroom.	3.75	Agree	Highly Level
Overall	3.91	Agree	Highly Level

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level



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3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level
5	4:51 - 5.00	Strongly Agree	Very highly level

### LEGEND

Teachers have the highest self-confidence in explaining how to use technology to enhance the learning process in classrooms and in formulating lessons with subject-matter software. This "confident high self-perception" is measured with a mean 4.09 score. Also relatively high, but slightly lower in gains of 3.75-3.82, are in the dimensions of describing educational software, a technology acquisition budget plan, and remote collaborations. That means teachers are good in terms of conceiving and planning for technology use; they are not truly proficient yet in budgeting or collaborating skills.

What these results show is teachers have a good foundation in thoughtfully integrating technology into their instructional designs-in effective understanding of digital pedagogy. On the flipside, proficiency in constructing lessons and technology usage indicates readiness in advancing student learning through digital means. Budgeting and some collaborative efforts turned out to be minor in terms of scores but would provide a venue for professional development focused on these skills, since they are fundamental to successful and effective incorporation of technology in the long run.

The finding is in line with Christensen and Knezek (2017) where proficiency in planning and integrating technology is important among teachers to achieve successful implementation in their classrooms. Besides that, Ertmer and Ottenbreit-Leftwich (2010) demonstrated that confidence and skills in using technology for instructional planning and collaboration have influences on classroom practice and openness to innovation. All these studies argue for the importance of teacher preparedness in both theoretical and practical angles of technology integration into education.

#### Teaching with Emerging Technologies

Table 14 illustrates that teachers see themselves as highly competent in utilizing emerging technologies for teaching, obtaining an overall mean of 3.88 in a 5-point interval. Confidence was highest in employing social media tools such as Facebook and Twitter for classroom instruction (4.04), followed by the use of mobile devices for learning activities (3.94) and for professional development (3.90). Other skills included creating wikis or blogs for student collaboration (3.88), using smartphones for student responses (3.86), teaching in one-to-one device environments (3.85), using online tools for distance teaching (3.84), and integrating mobile technologies into the curriculum (3.77). All these indicators are rated with "Agree" as a quantifying interpretation, featuring a qualitative interpretation of "Highly Level," thus indicating strong readiness to incorporate these technologies in teaching.

Table 14:Level of Technological Proficiency of Teachers interms of Teaching with Emerging Technologies

INDICATOR	Mean	Descriptiv	Qualitative
INDICATOR	Ivicali	e Rating	Interpretatio



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			n
use social media tools for instruction in the classroom. (ex. Facebook, Twitter, etc.)	4.04	Agree	Highly Level
use mobile devices to have my students access learning activities.	3.94	Agree	Highly Level
use mobile devices to connect to others for my professional development.	3.90	Agree	Highly Level
create a wiki or blog to have my students collaborate.	3.88	Agree	Highly Level
find a way to use a smartphone in my classroom for student responses.	3.86 0	Agree	Highly Level
teach in a one-to-one environment in which the students have their own device	3.85	Agree	Highly Level
use online tools to teach my students from a distance.	3.84	Agree	Highly Level
integrate mobile technologies into my curriculum.	3.77	Agree	Highly Level
Overall	3.88	Agree	Highly Level

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level
3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level
5	4:51 - 5.00	Strongly Agree	Very highly level

#### LEGEND

Such data reflect a positive trend parallel to the developments in educational technology worldwide. According to the 2023 GEM report by UNESCO, many education systems across the globe assist teachers in the development of their ICT competencies, which corresponds to the confidence teachers report for themselves concerning emerging technologies. Likewise, a survey of 2023 reported that 89% of K-12 teachers use educational technology to enhance student engagement. Nevertheless, investigations carried out in Nigeria and other developing contexts show that emerging technologies are



growing in awareness. Proficiency and use, however, differ, and, unfortunately, severely limited by access, training, and support. Hence, the importance of in-service training cannot be over-emphasized in keeping those tools functional and up-to-date in the hands of educators.

Exceptional concentrations of proficiencies in social media and mobile device usage show the teachers' adaptation to these great interactive and collaborative digital tools highly relevant for student engagement and personalized learning. Their competence in educating students in one-on-one environments and online tools for distance education indicates readiness for flexible and hybrid learning models-an essential skill magnified by the global implications brought onto education by the COVID-19 pandemic. Slightly lower scores on curriculum integration of mobile technologies indicate that there is still room for growth in embedding these tools into teaching plans systematically.

Studies to back up the above notion highlight that teachers' proficiency in technology is absolutely vital for quality teaching and learning in the 21st century. As Saad and Sankaran (2020) claim, by being technically competent, the teacher can communicate, organize information, and enhance productivity through technology. Additionally, some research indicates that the proficiency level of emerging technology correlates with better instructional practices and student outcomes. While teachers are increasingly starting to adopt digital tools, the emphasis should also be on the necessity for further training and institutional support to ensure that technology can be optimally harnessed within their classrooms.

### Emerging Technologies Skills

Table 15Self-rated among teachers as proficient in emerging technology skill, teachers hold that on an average they hold 3.92 on a scale of 5. The maximum proficiency was rated in saving or retrieving files in a cloud-based environment (4.07), which clearly suggested that teachers are very capable in using these cloud technologies for the purpose of collaboration and accessibility. Sending and receiving text messages (3.97) and downloading/viewing streaming videos (3.92) are also high on their list, thereby indicating comfort with mobile communication and multimedia content. Likewise, skills in downloading and reading e-books (3.88), listening to podcasts/audio books (3.87), and transferring photos or other data via smartphones (3.79) are rated as very much competent, displaying the teachers' skill in accessing and sharing a plethora of digital resources.

INDICATOR	Mea n	Descriptiv e Rating	Qualitative Interpretatio n
save and retrieve files in a cloud-based environm	e 4.07	Agree	Highly Level
send and receive text messages	3.97	Agree	Highly Level
download and view streaming movies/video clips	3.92	Agree	Highly Level
download and read e-books.	3.88	Agree	Highly Level

Table 15:Level of Technological Proficiency of Teachers interms of Emerging Technologies Skill



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download and listen to podcasts/audio books.	3.87	Agree	Highly
L	5.07	Agree	Level
transfer photos or other data via a smartphone.	2 70 A groo	Highly	
1 1	ne. 3.79 Agree		Level
Overall	3.92 Agree	Highly	
Overall		Agiee	Level

Scale	Range	Descriptive Rating	Qualitative Interpretation
1	1.00 - 1.50	Strongly Disagree	No level
2	1.51 - 2.50	Disagree	Low level
3	2.51 - 3.50	Undecided	Moderately level
4	3.51 - 4.50	Agree	Highly level
5	4:51 - 5.00	Strongly Agree	Very highly level

#### LEGEND:

These competencies correspond with the trends in educational technology for 2025, which stipulate cloud computing, mobile technologies, and multimedia learning environments to be some of the fundamental threads in the weaving of teaching and learning. In addition, the successful implementation of AI-driven personalized learning systems and the immersive experience of VR/AR technologies depends on teachers' competence in handling digital media and cloud platforms. Thus, more and more of these competencies have become the focus of various professional development programs that educate teachers on how to deploy these technologies effectively in their classrooms.

By and large, strong teachers' skills in cloud file management, mobile communication, and multimedia resource use further situate them with a view to utilizing emerging technologies to enhance collaboration, engagement, and learning personalization. Continuous investment in professional development and infrastructure will be required to sustain and eventually expand their competence in keeping with the ever-changing tenor of education as we enter the year 2025 and beyond.

#### OVERALL TECHNOLOGICAL PROFICIENCY OF THE TEACHERS

Table 16 summarizes the levels of technological proficiency possessed by teachers in 6 domains, namely: Email, Integrated Application, Emerging Technologies Skill, Teaching with Technology, Teaching with Emerging Technologies, and World Wide Web (WWW) browsing. The range of mean scores is between 3.86 and 4.00, while all indicators are of "Agree" and interpreted as "Highly Level". This means that teachers consider themselves as highly proficient in those technological domains. But the overall mean is being reported as 3.36, which seems inconsistent with the mean of individual domains.

Uppermost among the results of proficiencies is Email and Integrated Application (both 4.00), signifying strong confidence in communication and using combined software tools. These are followed closely by Emerging Technologies Skill (3.92) and Teaching with Technology (3.91), indicating ability



to use modern digital tools as well as integrating technology into teaching. Teaching with Emerging Technologies (3.88) and WWW browsing (3.86) indicate solid competence for modern instruction technologies and internet navigation. Such consistency implies an overall capability in technology.

Table

INDICATOR	Mean	Descriptiv e Rating	Qualitative Interpretation
Email	4.00	Agree	Highly Level
Integrated Application	4.00	Agree	Highly Level
Emerging Technologies Skill	3.92	Agree	Highly Level
Teaching with Technology	3.91	Agree	Highly Level
Technological Proficiency of Teachers in terms of Teaching with Emerging Technologies		Agree	Highly Level
www	3.86	Agree	Highly Level
Overall Mean	3.92	Agree	Highly Level

16:Level Technological Proficiency of Teachers in overall level

LEGEND



**D**.

	Sealche	Rhighly profic	Dencyiptivec Raciogy across all are	Qualitatived atogestation dine	ss abso effectively in
mean flexible	1	1.00 - 1.50	Strongly Disagree	No level	being to
	2	1.51 - 2.50	Disagree	Low level	
	3	2.51 - 3.50	Undecided	Moderately level	
	4	3.51 - 4.50	Agree	Highly level	
	5	4:51 - 5.00	Strongly Agree	Very highly level	

0

changing educational tools. Overall mean difference therefore requires verification of calculations to adequately reflect the real teacher proficiency level.

These results are supported by Christensen and Knezek (2017), validating the high proficiency linked by the Technology Proficiency Self-Assessment Questionnaire in communication and application tools to effective technology integration in education. According to Saad and Sankaran (2020), these ICT skills, including emerging technologies, will significantly increase the quality of teaching and enhance learners' engagement. Teachers' high proficiency in these aspects aligns with the international trend emphasizing digital literacy as a core competency for educators.

### <u>RELALTIONSHIP BETWEEN TECNLOGICAL PROFICENCY, TECHNOSTRESS COPING</u> <u>MECHANISM AND WORKLOAD MANAGEMENT</u>

Table 16 provides data on the R-values and associated P-values of each coping strategy with respect to the Workload Management factors. The variables include the Technostress Coping Mechanism overall and its sub-Types-Emotion-Focused Coping, Problem-Focused Coping, Social Support Coping, and Avoidance-with regard to Workload Management and its components: Non-Teaching Activities, Support and Management Activities, and Administrative Activities.

The overall Technostress Coping Mechanism has been correlated moderately and positively (r = 0.315) with the Technological proficiency on which the Technostress Coping Mechanism is expected to work; its validity is very high (p < 0.001). Among the coping subtypes, Problem-Focused Coping shows a significant positive correlation (r = 0.224) along with Social Support Coping (r = 0.207) and Avoidance (r = 0.232), suggesting that these strategies have meaningfully related to the outcome measured. Between these, the Emotion-Focused Coping appears to have a weak correlation (r = 0.099) and insignificant correlation (p = 0.118).

In respect to workload management, the overall score correlates positively and significantly (r = 0.234, p < 0.001). Non-Teaching Activities have the strongest positive correlation (r = 0.340, p < 0.001), meaning their strong association with the variable of interest. Administrative Activities show a weaker but still significant correlation (r = 0.135, p = 0.032). Support and Management Activities do not show a significant relationship (r = 0.031, p = 0.627).



Table 17: Correlation between Technological Proficiency and Technostress Coping Mechanism and Workload Management

UE .315 .099 .224	.000** .118 <sup>NS</sup> .000**	P-VALUE
.099	.118 <sup>NS</sup>	
.224	.000**	
.207	.001**	
.232	.000**	
.234	.000**	
.340	.000**	
.031	.627 <sup>NS</sup>	
.135	.032*	
	.031	.031 .627 <sup>NS</sup>

\*\*p<0.01, NS=Not Significant

#### \*p<0.05

These results imply that teachers' use of certain coping mechanisms-especially Problem-Focused, Social Support, and Avoidance strategies-are significantly related to how teachers manage technostress or related outcomes. It appears that Emotion-Focused Coping does not play much of a role here. The same goes for workload management overall with this outcome. In particular, Non-Teaching Activities stand out in this respect. This may imply that teachers who manage non-teaching tasks well perceive better outcomes or less technostress. The non-significance of Support and Management Activities indicates that they may not exert a direct influence on the measured variable.

The results corroborate the pre-existing literature regarding coping and workload in academic settings. For instance, Ragu-Nathan et al. (2008) found that problem-focused coping is effective in managing technostress, whereas social support serves as a stress buffer. Avoidance coping, although sometimes deemed maladaptive, may provide short-term relief in a high-stress environment. This support for non-teaching activities is consistent with research that highlights the impact of administrative and extracurricular workload on teacher stress and job satisfaction (Kyriacou, 2001). The insignificant role of support and management activities might indicate variability in the quality of institutional support or in teacher perceptions.

#### **REGRESSION ANALYSIS OF THE VARIABLES**

The multiple regression analysis conducted shows how the Non-Teaching activities, Avoidance and Problem-Focused Coping are predictor variables for the technological proficiency. The overall model was significant at statistical level (F = 19.979, p < 0.001), which confirms that jointly these predictors explained a considerable proportion of variance in the outcome. Adjusted coefficient of determination of  $R^2 = 0.180$  indicates that 18% variability of the technological proficiency is explained by these three factors. Although it may seem modest, it is in line with the effects typically seen in psychological and social research, where multiple interacting variables influence quite complex outcomes (Field, 2013; Cohen & Cohen, 1983).

 Table 18: Regression Analysis between the Technostress Coping Mechanism and Workload Management

 on Technological Proficiency



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			Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	1.852	.208		8.892	.000
Non-Teaching Activities	.196	.039	.295	5.027	.000
Avoidance	.093	.029	.189	3.241	.001
Problem-Focused Coping	.089	.033	.159	2.707	.007
R-VALU=-0.424	$R^2 = 0$	.180	F-V.	ALUE =	19.979
PROB=0.000					

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Non-Teaching Activities proved to be the best predictor among the other predictors with a standardized coefficient (Beta) of 0.295 and a very significant t-value of 5.027 (p < 0.001). This implies that as there are more non-teaching activities, the technological proficiency is higher in consonance with earlier findings that correlate workload factors with technology use by teachers (Skaalvik&Skaalvik, 2017). Avoidance was also a significant predictor of technological proficiency with a Beta of 0.189 and a t-value of 3.241 (p = 0.001), which signifies teachers who avoid employ higher technological proficiency, consistent with coping mechanism-related research and stress management in educational contexts (Lazarus &Folkman, 1984). Next, Problem-Focused Coping presented a positive but smaller effect (Beta = 0.159, t = 2.707, p = 0.007), making it a relevant but less strong predictor compared to the others, reaffirming the role of adaptive coping in professional development (Carver, Scheier, & Weintraub, 1989).

The coefficient of determination was 0.180, meaning that about 18.0% of variance in technological proficiency among teachers could be explained by the combined effect of non-teaching activities, avoidance, and problem-focused coping. F-value of 19.979 with 0.000 significance level indicates that the regression model statistically significant, proving that the predictors collectively provide essential input in explaining proficiency in technology (Field, 2018).

The regression equation according to unstandardized coefficients is:

 $Y^{1}=1.852+0.196X_{1}+0.093X_{2}+0.089X_{3}$ 

Where

- Y<sup>1</sup> = Technological Proficiency
- $X_{1=}$  Non-Teaching Activities
- $X_{2=}$  Avoidance
- X<sub>3=</sub> Problem-Focused Coping



Given the significance levels for all predictors and the overall model, both null hypotheses are rejected at the 0.05 level of significance. Specifically, we reject Ho1. The results indicate a significant relationship between technostress mechanisms and workload management on technological proficiency among teachers. Ho2 also gets rejected which corroborates the presence of significant predictor variables of technological proficiency in the model. Thus findings underscore the necessity to regard workload and coping strategies as ways to better enhance teachers' technological know-hows (Ayyagari, Grover, & Purvis, 2011).

#### SUMMARY, CONLUSION AND RECOMMENDATION

#### SUMMARY

The study investigated the technological proficiency of teachers in the Division of Bukidnon as it relates to technostress coping strategies and workload management. First, technostress coping mechanisms for basic education teachers were assessed across the following four mechanisms: emotion-focused coping, problem-focused coping, social support, and avoidance. Results showed that teachers rated all four strategies as highly practiced, with social support coping averaging the highest at 4.15, followed by emotion-focused coping (M = 4.06), avoidance coping (M = 3.98), and problem-focused coping (M = 3.89). Mean scores averaging at 4.02 indicate general agreement that these modes are utilized very often. Correlation analyses revealed that problem-focused coping (r = .224, p < .001), social support coping (r = .207, p = .001), and avoidance (r = .232, p < .001) were significantly, positively correlated to technological proficiency, whereas emotion-focused coping showed no significant correlation (r=.099, p=0.118).

The assessment of workload management in terms of non-teaching activities, support and management activities, and administrative activities. Teachers reported high management of non-teaching (M = 4.07), support and management (M = 3.91), and administrativeWorks activities (M = 3.84), with an overall mean for workload management of 3.94, indicating that workload was often managed well across the board. Correlation results showed that non-teaching activities had the strongest positive correlation with technological proficiency (r = .340, p < .001), followed by administrative activities (r = .135, p = .032); support and management activities showed no significant correlation (r = .031, p = .627).

The level of teaching technological proficiency was assessed across six factors: email, www, integrated software, teaching with technology, teaching with emerging technologies, and emerging technology skills. All factors were rated highly, with email and integrated applications scoring the highest (M = 4.00), followed by the overall mean of technological proficiency at 3.92, indicating a high level of competence in technology use.

Correlations between technological proficiency, technostress coping mechanisms, and workload management were investigated. Thereby, technostress coping mechanism, in whole, turned out to significantly correlate with technical proficiency (r = .315, p < .001) and workload management (r = .234, p < .001), presenting each as a significant contributor to teacher technological skills.



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Multiple regression analysis was used to determine the most vital predictors of technological proficiency. The model was significant (F = 19.979, p < .001) and accounted for 18.0 percent of the variance (R<sup>2</sup> = .180). Among the predictors, non-teaching activities appeared to be the strongest predictor ( $\beta$  = .295, p < .001), followed by avoidance coping ( $\beta$  = .189, p = .001) and problem-based coping ( $\beta$  = .159, p = .007). This indicates that teachers' effective management of non- teaching workload and usage of these adaptive coping strategies greatly enhances their technological proficiency.

Thus, teachers in the Division of Bukidnon highly practice various coping mechanisms and effectively manage their workload, which has a positive influence on their technological proficiency. Non-teaching workload management and fostering adaptive coping strategies are the areas highlighted by the study where emphasis can be put to advance teachers' ability to integrate technology in their teaching practice even further.

#### CONCLUSION

The study reveals that teachers of the Division of Bukidnon have a higher level of technological expertise, which is positively mediated by coping mechanisms pertaining to technostress along with workload management. They use problem-focused, avoidance, and social support as different strategies for the effective management of technostress. Regarding workload management skills, teachers further excel, particularly when accompanied by duties outside teaching and those requiring office skills. These factors constitute their ability to integrate and apply technology in the classroom.

The study avows that these mechanisms of coping and the management of workloads are important in the development of a teacher's technology literacy. It suggests that supportive systems and training in adaptive coping strategies will go a long way in further advancing technological proficiency among teachers, alongside strategies for improved management of workload. Such enchants the need to improve the conducive working environment for teachers through educational leaders and policymakers, which in turn should minimize the incidence of technostress and workload pressure. Such actions will improve instruction quality and learning outcomes in the teachers' use of technology. Finally, it would benefit the students of the Division of Bukidnon in improved teaching and enhanced learning.

#### RECOMMENDATIONS

The Division of Bukidnonadministrators may consider implementing programs directed at enhancing mechanisms for coping with technostress and workload management of teachers. School heads may provide training and workshops that help in fostering adaptive coping techniques, such as problem-focused and socially supportive coping strategies, while at the same time offering effective ways for handling non-teaching workload and administrative burdens. Further, establishing a supportive work environment conducive to working together with collaboration and peer support may be a great factor in alleviating technostress and enhancing teachers' technological competencies. With such programs, improved technology integration into teaching should follow, leading to improved educational outcomes.

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