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TECHNOLOGY USE AND STUDY HABITS OF JUNIOR HIGH STUDENTS: A NARRATIVE STUDY

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ABSTRACT

This research paper has examined the technologies employed by junior high school students as far as study habit is concerned. The study employed the design of qualitative narrative inquiry in order to comprehend the way students incorporate digital tools into their everyday study processes. The data were gathered using in-depth interviews and the thematic analysis framework was used to analyze the data on a basis of Braun and Clarke (2006). The results showed that the most popular technologies among students during the study time are cellphones and laptops. There were four key themes that were identified: (1) access to academic information, (2) online completion of school assignments, (3) online academic communication, and (4) technology-mediated management of study. The participants reported searching with engines and instructional videos to clarify the lessons, preparing reports and multimedia projects with the use of digital applications, communicating with schoolmates and teachers via messaging services, and using the alarm and notifications to organize the studying process. Despite noting that social media and gaming may be distracting, students said that they have strategies of controlling their usage of technology. The results show that technology is closely integrated within the study patterns of the students and can be used as a study aid as well as self-management tool. This paper offers a detailed insight into the effect of educational technology on the study practices in early adolescence by foregrounding the lived experiences of students.

Keyword: educational technology, study habits, junior high school students, narrative inquiry, thematic analysis, and using digital learning.

1. INTRODUCTION

For junior high school students today, technology is undoubtedly an integral part of their everyday lives rather than a classroom tool that is scarcely used. Besides being mediums for teachers to give assignments, smartphones, tablets, laptops, and social media platforms are also used by the students for searching information, collaboration with the classmates, revision of lessons, as well as for the management of other academic tasks. As education unfolds outside of the classrooms, students increasingly depend on technology for their studies at home. During early adolescence, when children are just starting to acquire study habits, their ways of using technology may very well be the factors that affect their concentration, work organization, and learning self-regulation.

In various studies, educational technology has been regarded as an effective way of facilitating access to information, encouraging collaboration, and improving student engagement (Tondeur et al., 2017). In addition, some research findings indicate that when students use digital resources purposefully, for instance, through note-taking applications, learning management systems, and educational videos, they can improve their self-regulated learning (Anthonysamy et al., 2020; Broadbent, 2017). Some researchers, however, argue that equipping students with too many technical devices might distract them and result in mental overload, especially if students multitask or are constantly exposed to online stimuli in the same way one bombard a person with noises (Sweller, 1988; Junco, 2012).

According to the socio-cultural theory, learning is the result of interaction and the employment of tools within the given social contexts (Vygotsky, 1978). Therefore, technology should be seen not as a mere gadget but rather a technological tool that is at the forefront of peer pressure, teacher, and parental expectations. Some recent studies have shown that teenagers' usage of technology is so much intertwined with their social life that it determines not only their academic engagement

but also their attention span and time management skills (OECD, 2019; Twenge, 2017).

Although more and more studies are being done on the relationship between technology and academic performance, a great part of the research output is dedicated to topics related to quantifiable outcomes such as grades or scores on standardized tests. These indicators are undoubtedly important, but they often fail to capture students' personal experiences and the meanings that they give to the use of technology (Selwyn, 2016). Even though we know that technology can have an impact on academic performance, it is less clear how junior high school students themselves would explain their use of technology during their study time at home, how they manage to take advantage of the benefits while at the same time facing the distractions, how they develop their own study routines, and to what extent these tools become part of their study habits.

Because study habits formed in early adolescence can significantly determine the academic success of a student, it is very important to pay attention to the experiences of the students themselves. For this reason, the present paper, through the method of narrative inquiry, investigates how junior high school students talk about their use of technology in relation to their study habits. Listening to their narratives, this study intends not to make general statements about digital learning but rather to get a glimpse of how technology is integrated into students' academic life at the level of their everyday practices (including challenges, strategies, routines, and reflections) by means of these stories. In this manner, the research aims at delivering not just a profound but also a well-contextualized interpretation of the utilization of technology by junior high students.

2. REVIEW OF TECHNICAL LITERATURE

Generally, educational technology refers to the professional ethics of achieving learning and enhancing performance by using technological processes and resources in a proper way (Januszewski and Molenda, 2013). The role that it plays has grown tremendously over the last decade especially with the introduction of mobile devices, cloud-based platforms and online learning systems in the day-to-day aspects of academia. Technology has not been limited to Computer laboratories or formal training, it now mediates in the search of information by students, sharing with their colleagues, doing assignments, and control of time in studies.

According to recent researchers, the effective integration of technology can promote engagement, collaboration, and access to learning materials (Tondeur et al., 2017). Nevertheless, technology in education can only be effective in its use by the students. According to research, self-regulated learning could be facilitated through the use of digital tools once students set goals, track their achievements, and arrange their activities using them (Anthonysamy et al., 2020; Broadbent, 2017). On the other hand, unsupervised or excessive technology use can cause distraction, divided attention, and poor academic achievements (Junco, 2012; Han, 2022).

The use of smartphones is almost ubiquitous among adolescents. Research indicates that although smartphones have potential uses in such academic tasks as watching instructional videos and interacting with teachers, they also pose a threat of multitasking and digital distraction (OECD, 2019; Wang et al., 2023).A study conducted by Perez-Juarez et al. (2023) has revealed that students generally struggle to control digital distractions when they are supposed to be learning, and this consequently affects their concentration and productivity. These results indicate that the role of technology in studying is complicated and depends on the self-regulation abilities of students.

Cognitive Load Theory (CLT) can also be used to explain the relationship between technology and study habits. According to Sweller (1988), the working memory is limited and overload of the cognitive system can be detrimental to learning. Cognitive overload can arise in the digital environment where students have to work with multiple applications, switch, and process a significant amount of information. The recent arguments regarding CLT suggest the significance of instructional design and structured use of technologies to reduce unnecessary cognitive load (Ashman and Sweller, 2023). In this regard, it is essential to know how students of junior high schools can deal with digital tools when studying.

On the socio-cultural side of learning, the means are mediated and the social interaction modulates learning (Vygotsky, 1978). Technology is a

cultural instrument that is determined by peer-expectations, practices of teachers and family norms. According to Selwyn (2016), the use of technology by students is indicative of social and institutional conditions and not an individual decision. In the same vein, Dai et al. (2022) reported that the interaction of self-regulation skills and the availability of support systems in the online learning process predetermined the activity of young people during remote schooling. These results underscore the fact that study practices are not made separately, but emerge in a social context influenced by the technology and culture.

Even though the association between technology and academic success is a subject of various studies, most literature concentrates on the quantitative results of academic achievement, including grades and test scores (OECD, 2019). Little research has been conducted looking at the self-reported description of technology use by junior high school students in combination with their own study habits. Selwyn (2016) remarks that the lived experiences and interpretations of digital learning practices are more commonly disregarded by students in favor of performance measurements.

Since early adolescence is a developmental period in developing long-term study habits, listening to the stories of students will shed more light on how technology becomes institutionalized into the everyday learning process. Through stories of students in this study, the researcher aims to know not only what they do with the technologies but how and why they do so, how students cope with distraction, and how these practices influence the way they study.

In this way, the narrative inquiry addresses the research gap in the literature, by preempting the lived experience of the junior high students in their study practice in terms of using technologies, which provides a more insightful perspective than achievement-based indicators.

3. RESEARCH METHODOLOGY

This research used narrative inquiry to explore the experiences of Grade 9 students at Buda National High School and understand the influence of technology through their experience's story. The student's experiences will be built in the past, present, and the future.

The study is conducted at Buda National High School, Buda, Marilog district, Davao City under the Division of Davao City, for the reason that the setting reflects the typical environment where students engage with technology and study; provides a

convenient access to participants, data and resource necessary for the study; and it allows for adequate control over variables and conditions, enabling accurate observation and analysis of technology's impact on study habits.

The participants of this study are the three Grade 9 students from Buda National High School located at Buda, Marilog District, Davao City. Purposive sampling are used in selecting the participants. The researchers choose biographical case studies as a type of narrative inquiry in understanding the influence of technology in the study habit of students. The researchers will elicit data from the participant and will write them up as narratives, possibly for further analysis. To collect data and achieve the goal, the researchers will use systematic procedure taken from Braun and Clarke (2006) to have deeper understand live experiences.

Inclusion criteria

Table 1.

Inclusion Criteria

1	Grade 9 Students
2	Students with gadgets
3	Age ranges from 14-16 year old
4	With Study Habits
5	With variation in academic performance

Instrument Validation and Triangulation

The survey questionnaires used by the researchers was validated by the expert and the result of the data was being reviewed by researchers in a form of a group discussions and through the expert Dr. Cherly C. Cordova.

Data Analysis

To achieve the exaction, the researchers systematically analyzed the data by reading and coding (inductive) repeatedly to figure out the themes, to find the fruitful experience. Coding involves systematically labeling and categorizing different sections of the data according to their content. The following are the processes in analyzing the data using the framework of Braun and Clarke (2006):

a. ***Generating initial themes*** – identification of patterns and connections between different codes; grouping similar codes together to form initial themes or categories

Review and refinement – review of initial themes and consideration if they accurately represent the data. Refine themes as needed to ensure they capture the essence of the data.

Define and name themes –defining each theme clearly, providing a concise description of what represents.

Interpretation – considering the implications of the themes; and what do they reveal about the research questions or topic; and how do they contribute to existing knowledge or understanding.

Report Writing – writing up the findings, incorporating quotations or examples from the data to support each theme. Providing a coherent narrative that explains how the themes emerged and what they signify.

4. RESULTS AND DISCUSSIONS

This chapter presents the analysis and interpretation of the data gathered from the

foregoing study which aims to determine the influence of educational technology in relation to the study habits of Junior High School students.

The following are the processes in analyzing the data using the framework of

and Clarke (2006).

Presentation of Findings

Generating Initial Theme

The findings of this study revealed that the common educational technology used by

the students are cellphones and laptop.

The participants utilized these technology by doing research to access information in Google, YouTube, Facebook, and Messenger to have clearer understanding, taking pictures of their lesson instead of copying, video editing, report making through

PowerPoint presentation, and to fast track the completion school requirements. This simply shows that with the use of technology the students were able to adhere independent learning. Through messenger, participants reached out to their classmates and teachers for sharing of ideas and online consultation respectively. In order to avoid distraction during study time, the participants allow themselves to engage in gaming or social media as a breather or stress reliever. They also set-up notifications as a reminder for studying by setting alarm, and activity recorder to catch-up with deadlines. A constant access in online tutorial ease them especially confusing vocabulary words.

Review and Refinement

Table 2.

Initial Themes

Statement of the Problem	**Initial themes with corresponding General Themes**
How students utilized technology in relation to their study habits?	Access to information, and Online tutorial - *Independent Learning.*
	Personalized learning, Report making through PowerPoint - *Self Directed Learning.*
	Proper time management, Fast track completion of requirements - *Time Management.*

	Online Consultation- Collaboration with Classmates and Teachers.
	Stress reliever or Breather- Relaxation and Meditation.

Define and Name Themes

Independent learning

It is a process where learners take the initiative in diagnosing their learning needs, formulating goals, identifying resources, choosing and

implementing strategies, and assessing their learning outcomes. It emphasizes self-motivation, self-regulation, and the ability to learn autonomously without constant guidance from teachers (Garrison, 1997).

Self-directed learning

It is a process in which individuals take the initiative, with or without the assistance of others, to diagnose their learning needs, set learning goals, identify resources for learning, select and implement appropriate learning strategies, and evaluate learning

outcomes. This approach emphasizes the learner's active role in managing and directing their educational experiences, promoting autonomy and lifelong learning skills (Knowles, 1975).

Time management

It is the process of planning and exercising conscious control over the amount of time spent on specific activities, particularly to increase effectiveness, efficiency, and productivity. It involves a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects, and goals (Britton & Tesser, 1991)

Collaboration with classmates and teachers

In this particular study, the participant shared how they communicate with their peers and teachers by messenger. The teachers on the other hand, uses Google classroom to post activities

Relaxation and meditation

Relaxation is the process of reducing tension and stress in the body and mind, often achieved through activities that calm the nervous system, slow the heart rate, and bring about a state of physical and mental ease. Techniques for relaxation can include

deep breathing exercises, progressive muscle relaxation, and engaging in leisure activities that promote a sense of peace and well-being (Smith, 1999). Meditation is a practice where an individual uses a technique, such as mindfulness, or focusing the mind on a particular object, thought, or activity, to train attention and awareness, and

achieve a mentally clear and emotionally calm and stable state. Meditation is often used to reduce stress, enhance concentration, and promote emotional health (Goleman,

1988) .

Interpretation

Table below shows the generated themes with the corresponding interpretation.

Table 3.

General Themes

SOP	Themes	Interpretation
	Independent Learning	Participants used technology as part of their study routines to access information through online research to gain knowledge and understanding. Through technology, participants can easily take pictures of some notes instead of copying it to have efficient time management. Moreover, it is very useful for videoediting as one of their school requirements.

Utilization	Self-Directed Learning	Students describes how they employed prioritization strategies and set clear learning goals to guide their technology use. They recounted creating to-do lists, calendars, and schedules to organize their academic responsibilities and allocate time for specific technologyenabled tasks, such as online research, virtual collaborations, and multimedia content creation.
	Time Management	Students describes how they employed prioritization strategies and set clear learning goals to guide their technology use. They recounted creating to-do lists, calendars, and schedules to organize their academic responsibilities and allocate time for specific technologyenabled tasks, such as online research, virtual collaborations, and multimedia content creation.
	Collaboration with teachers and classmates	In this particular study, the participant shared how they communicate with their peers and teachers by messenger. The teachers on the other hand, uses Google classroom to post activities.
	Relaxation and meditation	Educational technology provides access to relaxation and meditation apps and videos. Using these tools helps students manage stress and anxiety, enabling them to study more effectively. Relaxation techniques improve focus and concentration

Report writing

In this study, the researchers found out that the technology used by the participants are cellphones and laptop. They used it for research to access information to gain

knowledge for clearer understanding. Most students carry a cell phone and use it to access the internet and search pertinent topics for their studies. They also use the cell phone to collaborate and connect with their teachers and classmates to discuss things related to their lessons. Teachers post lessons and activities on Google classroom. Others conduct their classes through video call on Zoom and Google Meet.

''Sa pag note taking kanang matapulan ug sulat amo lang picturan ang naa sa board (During note taking and we get lazy writing, we just take pictures of the writings on the board)''.

Students practically use technology in independent learning. The study found that the integration of educational technology, such as online tutorials and digital learning resources, encouraged junior high school students to take a more independent approach to their learning. Gone were the days when students rely to teachers' lectures or textbooks for learning. With the utilization of technology, they can search on things that are not cleared to them and even have the chance to delve deeper into a certain topic. Thus, acquiring deeper knowledge on a certain subject. The easy access to search engines and educational sites empowered the students to explore topics at their own pace, revisit concepts they struggled with, and take a more active role in managing their own learning process. This shift towards independent learning allowed them to tailor their study habits to their individual needs and learning

styles.

''Research maam, kay kanang mag research ko kay makasabot ko. Dayon akong mga activities kay dali ra mahuman dayon makabuhat pa ko sa uban nga buluhaton

(Research, of course! I can have a clearer understanding. I can make my activities faster and I have remaining time for other things. Through technology I can access more website, and I have also easily accomplished my activities through the link provided)".

Closely related to independent learning, the study highlighted how educational technology facilitated a greater sense of self-direction among the participants. Having access to different engine searches, students can search on a certain topic and gain deeper knowledge. The availability of readily usable applications like PowerPoint able them to prepare reports easily and creatively. In addition, students' were able to set their own learning goals, monitor their progress, and make adjustments to their study strategies as needed. This autonomy fostered a greater sense of ownership and investment in their academic success, as they became active agents in their educational journey.

"Usahay kay makakuan ko, makakita kog ideas diri ug mag search ko or kanang

mag scroll2 ko sa facebook naa koy makit.an na unsaon pag report or unsaon pag defend sa mga kuan…"(Sometimes I can find ideas when I do research or by just scrolling on Facebook. I find ideas on how to do reporting or how to

defend my ideas)"

The study also revealed that the use of educational technology, such as online calendar, task managers, and alarms helped students develop more effective time management techniques. With the temptation of distraction just a click away, students are prone of cutting study time and engage in social media and online games. Utilizing technology, students' reported being able to prioritize tasks, minimize distractions, and allocate their time more efficiently across their studies, extracurricular activities, and personal life. Time management allowed them to strike

a healthier balance and reduce feelings of overwhelm and burn out. This also improve

their efficiency, and made them finish their tasks earlier, thus giving them time to do other things. While educational technology can facilitate independent and self-directed learning, the study also found that it enhanced opportunities for collaboration between students and their teachers, as well as among peers. It facilitates seamless collaboration between junior high school students, teachers, and peers, and enables students to engage in meaningful interactions, share ideas, and receive feedback in real-time. This collaborative environment promotes active learning, peer support, and a sense of community, enhancing students' communication skills and fostering a culture of knowledge sharing and teamwork.

"Mag contact ko sa akong classmates ug sa teacher kay through messenger and

google classroom pud sa among teacher kon mag post siya ug activities" (I contact my classmates and teachers through messenger. Our teacher also uses Google classroom to post activities)".

Interestingly, the study also highlighted the role of educational technology in supporting students' overall well-being and stress management. Educational technology can provide access to mindfulness apps, guided meditation sessions, and stress-relief resources that help students manage academic pressures and improve focus. By integrating these practices into their daily lives, junior high school students can reduce anxiety, increase resilience, and cultivate a positive mindset conducive to effective learning. A participant reported using social media engagement to help him relax and unwind in between study sessions. This is one example of student practice integrated into academic routines and reported to have contributed to a more balanced and sustainable approach to his studies.

"Ano like ang mga notifications dili sya mu

pop up" (Like notifications, should not pop

up")..

"Uu, bisag karon ga DND gihapon ko kay di

ko ganahan madisturbo ani atong interview

(Do Not Disturb)".

Overall, this research study provides valuable insights into how the integration of educational technology can shape the study habits and learning experiences of junior high school students, highlighting the emergence of themes such as independent learning, selfdirected learning, time management techniques, collaboration, and self-care practices. These

findings underscore the potential of educational technology to foster a more autonomous, efficient, and holistic approach to learning among this age group.

5. CONCLUSION

This is a narrative study, which investigated the type of technologies junior high school students use regarding their studying habits. The results showed that cellphones and laptops are the main technologies that are incorporated in the everyday study of the students. These devices are integrated into the way students get access to information, fulfil their academic needs, interact with each other and the instructor, and coordinate their study plans, instead of serving as secondary devices.

The research realized that students turn to technology to seek explanations with Google, watch educative videos on YouTube, see online summaries, and clarify the concepts they do not understand. These activities indicate that technology is a convenient academic aid which it can be used as a supplement to independent processing when studying. Moreover, learners use digital applications, including Power-Point, video editing programs to do school assignments with increased efficiency. Capturing photos of the notes, typing assignments, and making multimedia presentation represents the ways in which technology simplifies the completion of academic tasks.

Another benefit to online communication tools (specifically Messenger) that the findings demonstrate is its role in the study habits of students. In these platforms, students will get clarification, exchange information, and keep track of the assignments and deadlines. It means that technology assists in the academic cooperation that goes outside teaching hours.

In addition, the research found that to control the time of studying, students rely on technological aspects like alarms, notifications, and reminders. Though the respondents affirmed the existence of digital diversions like social media and gaming, they explained deliberate measures to curb these distractions such as taking brief digital breaks before going back to studying. This implies that technology could have two effects on the study routines of students, which is, as a distraction, and as a self-regulation aid.

All in all, the results suggest that technology has been integrated heavily into the study behavior of the junior high school students. The research does not present straightforward evidence of technology as either a positive or a negative factor, but displays the process of active incorporation of digital tools among the students in their educational activities. These lived experiences help to understand the nature of educational technology in a more subtle way, with the need to steer students towards mindful and moderate technology use that will promote healthy study practices.

6. RECOMMENDATION

Following the results of this narrative study a number of recommendations are given to the parents, school administrators, teachers and future researchers.

To begin with, because students use cellphones and laptops as the main tool of accessing information, as well as fulfilling all school demands, communicating with peers and teachers, and scheduling their studying sessions, parents are advised to play an active role in the regulation of how their children use technologies. Instead of simply supplying them with gadgets, parents ought to encourage intelligent and responsible use of digital devices that facilitate academic assignments. Being aware of popular learning platforms and applications can assist the parent in a better way supporting the study routines at home. Setting the habits of balanced screen use and promoting close study routines can also assist the students in overcoming possible distractions.

To schools and administrators, the findings indicate the fact of incorporating technology purposefully in the curriculum. Schools are supposed to set up purposeful opportunities that train students to be effective and responsible users of technology since students are already digital, use digital tools to conduct research, make presentations, communicate and manage time. It is suggested to include the digital literacy training in the curriculum to enhance the skills of the students to scrutinize the information they find online, be distracted, and use technology to learn productively. Moreover, it is essential that schools consider equal access to devices and stable internet connection to make it possible to make all the students take advantage of the digital learning

opportunities, irrespective of their socioeconomic status.

Educational instructors are advised to give instructions on how technology can be used effectively during learning hours. Because students have indicated that they used alarms, reminders, and online tools to control the learning process, teachers can contribute to the building of deliberate study skills by demonstrating the structured digital behaviors. The dual focus of technology as both a learning resource and a possible distraction can also be identified by the teachers to motivate the students to develop the skill of self-regulation and responsible internet use.

Lastly, it is advisable that future research incorporate further development of this study by use of longitudinal and multi-site research. Monitoring technology use and study patterns of students over a period of time could reveal more information about the development of digital habits in adolescence. Moreover, the future research can investigate different learning environments and groups to create a more comprehensive and open-ended perception of how technology affects the studying habit of students.

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