



Creative Writing in the Digital World: Assessing the Impacts of Digital Media on the Creative Writing Skills of Undergraduate Students

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Abstract

This study investigates the influence of digital media on the creative writing skills of undergraduate students at the University of Malakand, utilizing the Atkinson and Shiffrin Model of Information Processing (1968) as a theoretical framework. Employing a mixed-method approach, data were collected from 100 students through questionnaires and from 15 students through interviews. Quantitative data were analyzed using statistical methods to identify patterns and relationships between digital media use and creative writing skills, while qualitative data provided insights into students' attitudes and experiences. The findings reveal a complex relationship wherein digital media can enhance creativity by facilitating idea generation and engagement with diverse content, yet simultaneously present challenges for some students in maintaining focus and writing with depth. Notably, students who managed to balance digital media use with traditional writing practices exhibited superior performance in creative writing. These results suggest that integrating digital media literacy into the curriculum can foster both creative and critical thinking skills. Furthermore, this study contributes to the understanding of the Atkinson and Shiffrin Model by elucidating the influence of digital media on cognitive processes involved in creative writing. The study acknowledges limitations, including sample size and generalizability, and recommends that future research should explore the long-term effects and effective strategies for incorporating digital media in education. In conclusion, this research advances our comprehension of the impact of digital media on creative writing skills and offers practical recommendations for educators and policymakers, while also underscoring the necessity for continued research in the intersection of digital media and creativity.

Keywords: Digital Media, Creative Writing Skills, Information Processing Theory, Undergraduate Students, University of Malakand

Introduction and Background

According to Meeckings (2021), digital platforms are domains of new educational resources that permit students of different social classes, traditions, communication habits, levels of fluency, interests, areas, passions, subculture fans, tribalism and many other things participate in creative writing. Making familiar language from applications such as Instagram, Twitter, and YouTube as well as inclusion of Facebook, Twitter and Twitch links, tasks, and assessments pave the ways for prior knowledge and capabilities to deal with the new material and hence develop skills.

According to Connolly and Burn (2019), the story engine is a prototype online platform of researchers to help students to develop their creative abilities and creative writing. While taking part in the stories told on the story engine, they messed around with sentence structures, adjective selection and word choice. In this way they internalize vernacular styles and then they express themselves in this adaptive style of the language. The learners develop their education and digital skills, along with the processes through which they learn.

Today, digital media is the mainstream activity for the current student generation, which rests in the reading of content, viewing content, writing content and disseminating content. Despite the reduction of the digital division, however, between the students' digital practice and the approaches to communication taught in classrooms (Hundley & Holbrook, 2013). There still exists a considerable gap. The significant establishment of tools and approaches by teachers and educators is not enough, we should also understand the cognitive differences between writing for page and writing for digital media. Very little has been made so far to help us know how people and students cope with the multimodal/digital writing. (DePalma & Alexander, 2015).

Creative Writing

For the process of acquiring the new set of skills, creative writing is very significant. In addition to the principles, writing demands the same dedication. It not only helps students learn but also promotes their artistic creativity. Writing, which establishes the functions and the meanings, has a very positive impact on their thought processes, their imagination, and self-identification and more importantly they will learn to read and write. (Partridge, Roscoe, Postman, Gray et al. 1982).

According to National Association of Writers in Education (UK) creative writing can be defined as: Creative Writing is the area of study that includes writing (for example, poetry, fiction, drama, and creative non-fiction) and its contexts. It is the combination of a creative process as well as reflective exploration. By the term writing we do not only mean printed materials such as books and others, but also performances from the scripted and unscripted output, the spoken and recorded ones, and the different forms available in the electronic, digital, and new media. A Creative Writing course may choose any type of literary writing as the basis of study. However, these Creative Writing productions generally do not explain the world but rather present a unique and imaginative interpretation of the world that draws the audience into participating or reading as if it were real. (Bennett, Clarke, Motion, and Naidoo; 2008, 2).

Digital Media

Digital media are defined as CPU based tools that enable the public to create, participate and interact. And share knowledge, thoughts and video films in virtual groups and networks. (Kietzmann, Hermkens, & Silvestre 2011). Social media may be defined as the mutual and online communications channel dedicated to community base contribution, communication, content distribution and cooperation. Some of the main categories of social media include purpose animated discussion, micro blogging, communal networking, social book marking and wikis. (Kaplan & Haenlien, 2012).

Digital media sites have provided a platform where the youth can create groups and pages which are based on their general rules and ultimately end up creating relations and opportunities for their personal careers by knowing what to discuss for a day. Those youths who have been meeting they express that social media has become their lifestyle and it helps them save time, it has made their lives easier and efficient. (Swist, 2015)

Social network websites are also used for education as numbers of people are connected with them and if you have any query regarding your study you can connect with any teacher or maybe any people in the world which can provide you the solution of your query. The other use of Social Medias is also to share pictures, videos or files which are also useful for the education. (Albergotti, MacMillan & Rusli, 2014).

It is not as direct, but the Internet is also transforming the words we speak to each other not just the means by which we communicate. Even such a primitive communication activity as speaking is affected by our dependence on the Internet. Some abbreviations, neologisms and acronyms have become common in the language. (Chopra, 2013).

Alassiri et al (2014) has defined the social networking site as that of providing platforms for interactive communication between the members for the purpose of establishing social relations in which information and related knowledge concerning experiences of the individuals' activities in real life are shared.

Creative writing and Digital Media

Through the development of digital social media, it is not difficult for one person to communicate to another in the different countries in the world. The evolution of more diverse digital-based social media formats has facilitated communication changes in the speed with which people communicate either orally or in writing. (Ravindran, Ridzuan & Wong, 2022)

Numerous research papers demonstrate the fact that social media does not affect students' writing abilities. For instance, Ghouali & Benmoussat (2019) argue that the over-usage of social media does not benefit students as it affects their writing skills and even the performance of students at class or academically. Songxaba & Sincuba (2019), for instance states that writing short texts in social media has also instilled the habit of students using short words and sentences when writing their academic paper. They also do not begin sentences with capital letters and especially forget punctuation. Similarly, Funnell (2017) also states that it is the use of social media for writing text messages that has made students unable to write simple but comprehensible essays and reports. Students have now also acquired a culture of altering or reducing the length of words and sentence when composing papers which also contributes to the poor performance of the students (Zhou, 2021).

Research Objectives

1. To explore students' views on social media's impact on their creative writing.
2. To identify how social media affects students' writing processes.

Research Questions

1. What are the perceptions of students regarding the benefits and drawbacks of using digital media for creative writing?
2. How does social media influence students' creative writing ideas and inspiration?

Theoretical Framework

This research is based on the Atkinson and Shiffrin's information processing model of theory. This model conceptualizes memory in three stages: Sensory memory, hence, short-term memory and thus long-term memory in the sensory mode theorized by Atkinson and Shiffrin in 1968. Such stages are likely to be influenced differently by digital media's ever-flowing

stream of information in generating and realizing creative ideas. Therefore, the study, done under this model, aims at offering a theoretical understanding of how digital media influence the thought tracing in creative writing.

Significance of Study

These findings will be immensely helpful for educators, policymakers, and learners since they become a source of knowledge. Therefore, by outlining how creativity in writing skills is impacted by digital media skills, it is possible for a teacher to devise a strategy on how he/she can use digital media skills in the right manner, hence promoting creativity. The conclusions might be adopted to form guidelines and regulations concerning Internet use in school context. It is important for students to comprehend such dynamics to take better decisions regarding their everyday use of digital media.

Delimitations

1. The study is confined to undergraduate students enrolled in the department of English, University of Malakand.
2. The study focuses exclusively on digital media's impact on creative writing skills, excluding other writing genres.
3. The study's scope is limited to the specified research questions, excluding exploration of related topics.

Literature Review

All media exist to invest our lives with artificial perceptions and arbitrary values and indeed Media plays a major role in the lives of people in their daily schedules. Digital media in many ways influencing people's life as far as it impacts on our new social network and we get new horizons in the life through the social media connection though it changes the approach of communication, (Marshall McLuhan, 2003).

Young people today are actively using Facebook, Twitter, Google plus, Skype, Yahoo messenger and other technologies. It is due to the popularity of the smart phones and the wide use of the texting that students can contact their friends, family, and others. Because meeting different people of the other country, the new language is learnt by use of the conversation in the social media. Recent studies show that about 80 percent of teens use social media and employ various forms of communication in social media like Netspeak, overuse of abbreviations or slang. There is little to no question that the world we live in today has changed in terms of our social existence.

Creativity and Creative Writing

Creativity is the disposition to generate or identify options, opportunities or ideas that could be useful in expressing oneself to or negotiating with others or resolving a problem (Hensel, 2018). It is the capability to generate new and creative products or ideas. Of course, creative writing also involves creativity (Pentury et al., 2020). Creativity can assist the learners in dealing with change in language learning by offering more creative approaches. Thus, creativity is an element of the educational process and curriculum that must be applied in the process of teaching, writing, and designing of language materials. (Maley, 2015).

Creative writing (CW) is a product of creation since it involves the use of productive and expressive language. More so, Creative Writing activities require constant process and support (Santosa et al. 2019). Learners can convey their ideas within purposeful and meaningful words through creative writing. Creative writing entails such aspects as flexibility, elaboration, proficiency and fluency (Karuri, 2012). Starko (2010) expands on these characteristics briefly as follows: "which are fluency or a large number of ideas, the number of distinctive categories of ideas or perspectives, originality of ideas, and extent of elaboration of ideas" (p. 127).

Creative writing enables the learner to put down thoughts in the best way possible (Cramer, 2003). In other words, it is a skill that assists the students to develop new perspectives in relation to their ideas while writing. It can be used in school and universities to enhance creativity among students (Barbot et al, 2012). The rationale of creative writing is in imaginative thinking since this approach enables the learners to use their mental skills to create new and novel ideas, in a both a fluent and a flexible manner (Chandio, et al., 2013).

Benefits of Creative writing

Some benefits of creative writing for learners are, (Alan Maley, 2009);

- Creative writing helps in the mastery of grammatical, vocabulary, phonology and discourse levels of language.
- It promotes “scaffolding” which makes the learners to ‘play’ with the language to experiment with it without the feeling that they are committing a mistake.
- Creative writing focused more on the right side of the brain, the feelings, the physical sensations, the intuition and the musicality.
- Creative writing enhances self-confidence and self-esteem among learners because of the creativity that is fostered on the learners.
- As such, creative writing results to increased positive motivation in parallel.
- Creative writing is feeding into more creative reading. Thus, getting the process of creating the text, learners come to instinctively understand how such texts work, and this make them easier to read.
- Creative writing enhances the skills in the writing of expository texts.

Technology

In general, learning is affected by technology, and, in turn, technology can shape the development of the learners’ CW (Creative Writing) skill and other language skills. They can help students engage and communicate with other students and teachers then collaborate to create a product, work on group projects and learn together (Jiang et al., 2019).

This has been revealed by the fact that with the COVID-19 pandemic all teaching and learning that took place around the world was done fully online using different platforms. Nevertheless, now that the life is normal and the classes are again held in a normal course, it is crucial to conduct more research into the regular application of certain technological tools to enhance the types of language skills and to let the students interact with the learning process and, thus, enhance their language and other thinking skills.

The use of technology in process of teaching and learning is importance in developing the creative writing skills among the students because technology is useful in assisting the students and their willingness to learning (Tahsaldar & Semaan, 2018; Veiga & Andrade, 2021).

Digital Media

Digital social media is a convergence between personal communication in the sense of sharing between individuals (to be shared one-to-one) and public media to share to anyone without any individual limits (Sari, 2017: 5). Sari (2017: 5) Also, according to the study, social media can be described as the medium on the internet through which users represent themselves and engage in working, sharing, communicating with other users and even forming a virtual social community. Therefore, it is safe to state that social media is a way of communicating, interacting, sharing with friends or the whole world via the internet. It is noteworthy that social media is an interesting application that is liked by many people. It makes it easier for people or users to be able to speak, share ideas, and meet each other at their own convenient time and place. (MTUS, Putri, 2021).

Facebook

Of all the SNSs (Social Networking Sites), Facebook, which is the most popular SNS in the world today was created in 2004 and provided the connection tool to make new friends and friends you already have. Facebook was born in the University of Harvard. People can show hundreds of things that relate to the personality, for example, interest or hobby, favourite films and music, relationship status, age and much more. The research revealed that the leading SNSs can be used for teaching purpose for enhancing the user's English reading and writing skills. However, the instructors must integrate Facebook as a teaching tool into the curriculum as a project with clear learning outcomes to ensure the effectiveness of the result. Research done revealed, youths and kids that spent most of their time on internet activities specifically coming from this category had similar issue they have, and it is they often find it hard to concentrate in class. These people were mostly always distracted, and their attention span was much shorter compared to the members of the control group.

Instagram

Instagram as an application is developed by Kevin Systrom and Mike Krieger, the heads of the start-up company which they have created themselves, namely Burbn. Later, their stocks were bought out by the large company called Facebook in 2012. At first in Indonesia people used Instagram only for entertainment and to share moments of themselves with others, but over time Instagram has a multi-function as a means of sharing and disseminating information that occurs in society quickly (Maruf, 2017: 2-3).

According to Winarso (Maruf, 2017: 8) Instagram is an Android app, iOS or Window Phone operating system in the Android device where the user can use the camera to get a picture of the objects or take a picture from the camera or use other images that are stored in the device or the user can save images in their account or download images from the account. Instagram is named insta because it has seemed like the Polaroid camera which is famous for its instant click photos. According to this, Instagram originated from the term instant and telegram; it is used to share photos with other individuals (Followers) using the internet connection. This makes instagram better in some way because anybody can easily understand them than when they were written. In fact, there are only few options in the menu of Instagram and these options are take photo, home page, news feed, popular and profile.

Twitter

Twitter is a web-based social media platform that enables its users to post and read short messages of not more than 140 characters. but on November 7, 2017, it extended to 280 characters known as tweets. Twitter was created in March 2006 by Jack Dorsey and the social networking site was initiated in July. Since its launch, Twitter is ranked among ten most visited sites on the Internet and is often called «the short message of the Internet. » Every unregistered user can read the tweets, while the registered users can write the tweets by the website interface, by short messages or using various applications for mobile devices.

It is for this reason that twitter rapidly grew and in no time became popular across the globe. According to the data obtained in the beginning of 2013, the service has 500 plus million registered users, among them 200 plus million are active. It is also observed that the trends on the use of the Twitter increases when events that are popular are happening. By early 2013, active users of Twitter were posting more than 500 million tweets per day and Twitter was processing more than 1. 6 billion searches take place every day. This has made the positioning of Twitter to be second in the list of the most visited social networking site in the world displacing the second twenty-second.

Creative Writing in Pakistan

Salam (2011) believes that the trend of Creative Writing not to mention the industry of Creative Writing in Pakistan is also post-modern one, but he thinks the situation is the same in major

parts of the continent of India and the same is prevalent in most of the planet since a much longer period. Of course, the notion of creativity” will not reach the level of the popularity of the notion of “academic writing” across the nation (Naeem, 2010). Nevertheless, as Azam (2010) and Mansoor (2012) argue it is not possible to ignore this complex network of native writers who have contributed greatly to professionalizing and establishing the theory of creativity, particularly regarding popular fiction in English. But there are some who have a different opinion and think that the level of creativity is low over a larger area in the country and is particularly visible in universities.

Pros and Cons of Digital Media

In many ways, social media can be useful and advantageous, for instance, enhanced students’ collaborations (Suwannathachote & Tantrarungroj, 2012; Lampe, et al., 2011) Students are friends with their classmates through the social media platforms and are likely to work in groups. This can translate to increased student retention since students develop feelings of belonging and attachment towards the institution and their fellow students. For students’ engagement, faculty can utilise social media to encourage participation. While some students may be quiet in person, and many may not feel comfortable voicing their opinions in a classroom, this may not always be the case when they are behind a screen on social media. Now, students were using social networks since childhood, and for them, it is the most comfortable way to communicate. Faculty can post questions on social media like Facebook and the student can provide the answer to those questions in the form of a specific hash tag. This not only helps the faculty to locate where a particular student has provided answer to a given question but also enables students to learn what other students are responding and thus fosters more discussion.

As quoted by Risto (2014), English (2009) noted that students have gotten so used to write quickly without understanding how to reason as they write. The phenomenon of texting with their fast pace, instant messaging and social networks have led students to refuse the fact that writing is a process. Additionally, students are constantly bombarded with so many blogs, articles, and opinions from their fellow students and even movie and music icons that it becomes very hard for students to think.

Theoretical Framework

Information Processing Theory: Atkinson and Shiffrins Model (1968)

The Information Processing Theory, particularly the Atkinson and Shiffrin model, serves as the theoretical framework (underpinning) for this study as this study tries to investigate the influence of digital media on creative writing skills among undergraduate students at the University of Malakand. The Atkinson and Shiffrin model, also known as the multi-store model, posits that memory comprises three main components: sensory memory, short-term memory (STM), and long-term memory (LTM) (Atkinson & Shiffrin, 1968).

Sensory Memory and Digital Media

Sensory memory is the first phase, in which sensory stimuli from the external environment are taken for a very brief period (Sperling, 1960). Where digital media is concerned, often the information delivered is diverse with inputs such as text, pictures, videos and sounds which are some of the sensory inputs arriving first at sensory memory. This research assumes that both the availability and propagation of the vast material available in the digital environment influence sensory memory, affecting the way fundamental creative ideas are developed (Mayer, 2009).

In the case of Digital Media, students receive new information from several sources like social media, blogs, etc. through multimedia. It also plays a role in increasing sensory memory

because this is experienced by different stimuli which could lead to improvement in creativity. However, too much of sensory input is counterproductive, because the brain gets overburdened with the sensory information that is being fed to the brain and this ends up in sensory overload which is counterproductive in relation to sensory stimulation in that it interferes with other activities like creativity (Klingberg, 2009).

Short-Term Memory Processing

In the Atkinson and Shiffrin model, the information from sensory memory is transferred to the short-term memory where it undergoes some processing. Working memory can only hold a small amount of information and can only maintain that content for a few seconds or about 20 seconds if it is actively being rehearsed by the man (Miller, 1956). When it comes to digital media, Carr (2010, p. 89) points out that students often consume short bursts of data, in the form of brief information bits. Such interactions may facilitate cognitive processes that involve more complex learning such as helping students to think creatively through knowledge related to creative writing or lead to cognitive overloading, which inhibits the retention and transformation of relevant information required in creative writing tasks as posited by Sweller (1988).

In addition, the material shared through digital media is highly likely to receive comments/reviews from others, and the feedback is often immediate, which facilitates two critical steps of knowledge transfer, namely, review and reinforcement that move the information from short-term to the long-term memory. However, due to the interruptions here and notifications there, typical in micro usage of technology perhaps for informal learning purposes, it can be influenced negatively as has been pointed out by Ophir, Nass, and Wagner, (2009).

Encoding to Long-Term Memory

Information transfer from short-term to long-term memory is through encoding methods in which material is integrated, and then stored for later use (Craik, & Lockhart, 1972). Exposure and interaction with the digital media can help in the encoding process with enhancing various ideas in creative writing processes and storing them in the long-term memory. However, it is notable that the quality and depth of encoding depend greatly on the nature of digital interactions. Thus, this research focuses on how various forms of digital media help in enhancing depth of learning and mastery of creative writing skills (Schacter, 1999).

For example, blogging platforms, which initiate the reflection of the students' writing skills and encourages constant writing, can assist in the repetitive recall of creative writing techniques, therefore enhancing the creation of meaningful Implicit Memory traces. On the other hand, passive acquisition as seen when the students are just watching videos without really interacting with it, can entice the formation of shallow node packets which fail to enhance the ability to learn and write creatively (Kirschner & Karpinski, 2010).

Digital Media and Cognitive Processes in Creative Writing

This study applies to the Atkinson and Shiffrin model to investigate the specific ways in which digital media influences the cognitive processes involved in creative writing. By examining the sensory inputs, short-term memory processing, and long-term memory encoding facilitated by digital media, this research aims to identify both the benefits and challenges posed by digital environments for creative writing education.

Implications of the Model

By employing the Atkinson and Shiffrin model, this study aims to dissect the cognitive processes involved in creative writing in the digital age. The model helps to frame key research questions and the study about the role of sensory inputs, short-term cognitive load, and long-

term memory encoding in the development of creative writing skills through digital media. Understanding these processes provides a foundation for exploring how digital media can be harnessed to enhance educational outcomes in creative writing courses at the University of Malakand.

Research Methodology

This section presents the research design, population and sampling, data collection methods, data analysis procedures, and ethical considerations employed in this study. The purpose of this research is to explore the influence of digital media on the creative writing skills of undergraduate students at the University of Malakand using a mixed-methods approach.

Research Design

Choosing an appropriate research design for the study is based on the nature of the study being conducted, since the current study aimed at investigating the Influence of Digital Media on the creative writing skills of undergraduate students, it was deemed necessary to adopt mixed method design that incorporated both qualitative and quantitative research design. Mixed method research design as the name suggests is a combination of both quantitative and qualitative research design. A mixed-methods approach was chosen for this study to combine the strengths of both quantitative and qualitative research. Specifically, an explanatory sequential design was used. This design involves first collecting and analyzing quantitative data, followed by qualitative data to explain and elaborate on the quantitative findings.

Population of the Study

The participants of this study were undergraduate students enrolled at the University of Malakand. A total of 100 students were administered questionnaire, and 15 students were interviewed using semi-structured interviews. For which a convenience sampling technique was used to select participants, ensuring a diverse representation from the department of English University of Malakand.

Data Collection Methods

Quantitative Data

The quantitative data were collected using a structured questionnaire designed to assess the students' usage of digital media on their creative writing skills. The questionnaire consisted of three sections:

1. **Demographic Information:** Questions about age, gender, academic year, and field of study.
2. **Digital Media Usage:** Questions about the frequency and type of digital media usage (e.g., social media, online articles, videos).
3. **Creative Writing Skills:** Likert scale items evaluating aspects of creative writing such as originality, vocabulary, coherence, and narrative structure.

Qualitative Data

Qualitative data were collected through semi-structured interviews from 15 students. These interviews aimed to gain deeper insights into the students' experiences with digital media and its perceived impact on their creative writing. The interview guide included open-ended questions such as:

How do you use digital media in your daily life?

Can you describe how digital media has influenced your creative writing?

Do you feel digital media helps or hinders your writing process? How so?

Data Analysis Procedures

Quantitative Data

Quantitative data were analyzed using SPSS software. The analysis included:

Descriptive Statistics: To summarize the basic features of the data, including mean, median, mode, and standard deviation.

Inferential Statistics: To test the research hypotheses. This included t-tests to compare means between different groups (e.g., high vs. low digital media usage) and ANOVA to examine differences across multiple groups (e.g., different types of digital media).

Data Analysis

The analysis was based on responses obtained from a structured questionnaire comprising 7 Likert-scale questions. Each question has been individually analyzed, and an aggregate score has been calculated to assess the overall positive influence of digital media on the creative writing skills.

Quantitative Data Analysis

To answer question 1, What are the perceptions of students regarding the benefits and drawbacks of using digital media for creative writing? The researchers have conducted a survey to examine how digital media influences the creative writing skills of undergraduate students at the University of Malakand.

Questions Analysis

For each of the following questions descriptive statistics were calculated to understand the distribution of responses. Pie graphs are created to visualize the distribution, providing insights into participants' perceptions.

Q. NO: 1; *I frequently engage with digital media platforms for creative writing inspiration or information gathering.*

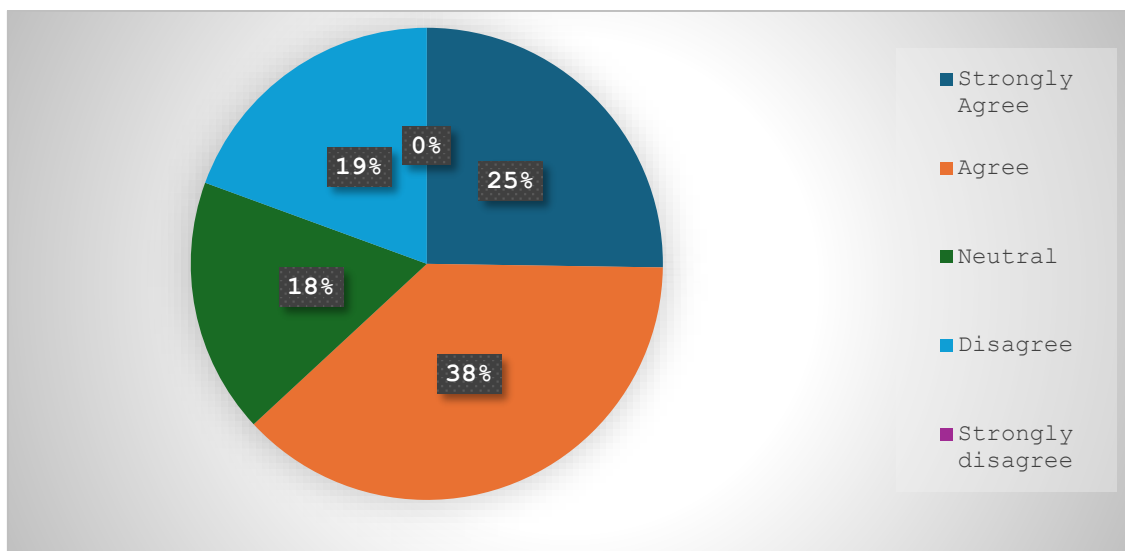


Figure 4.1

The pie chart illustrates the frequency of engagement with digital media platforms for creative writing inspiration or information gathering among respondents. The data is segmented into five categories:

The 25% of the respondents "Strongly Agree" with the statement, represented by the blue section. The largest group, comprising 38%, "Agree" with the statement, shown in orange. 18% of the respondents are "Neutral," indicated by the grey section. 19% "Disagree" with the statement, represented by the yellow segment. 0% "Strongly Disagree," which is shown by the absence of a segment for this category in the chart.

Overall, the data show that a majority of students engage with digital media platforms to some extent for creative writing inspiration or information gathering, with the largest group agreeing with the statement.

Q. NO: 2; When encountering creative writing content on digital media platforms, I often actively engage with it (e.g., read, interact, analysed)

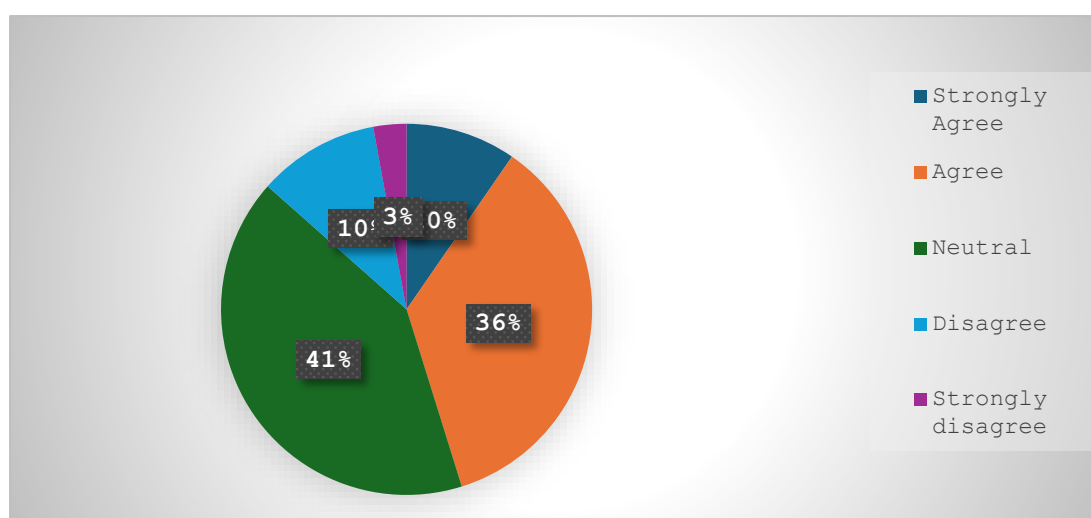


Figure 4.2

The pie chart illustrates the rate of engaging with creative writing content on digital media platforms. The data is segmented into five categories:

The 10% of the respondents "Strongly Agree" with the statement, represented by the blue section. The other group, comprising 38%, "Agree" with the statement, shown in orange. 41% of the respondents are "Neutral," indicated by the grey section. 10% "Disagree" with the statement, represented by the yellow segment. 3% "Strongly disagree," which is shown in the dark blue segment for this category in the chart.

Generally, the data show that most of the students' opinion regarding encountering the creative content on digital platforms are neutral, with the second largest group being agreed with the statement.

Q. NO: 3; I often incorporate ideas or techniques learned from digital media platforms into my creative writing?

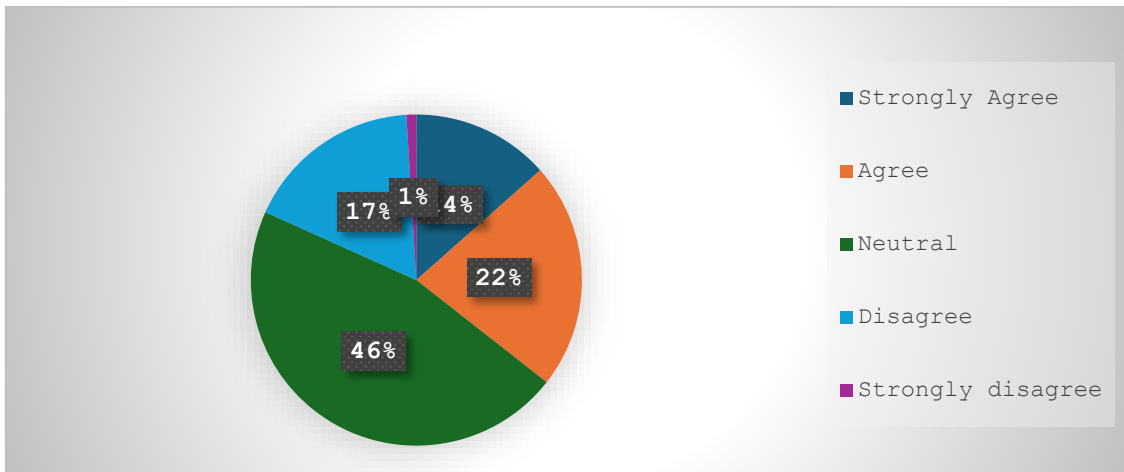


Figure 4.3

The pie chart illustrates the rate of incorporating ideas or techniques learned from digital media platforms into creative writing. The data is segmented into five categories:

The 14% of the respondents "Strongly Agree" with the statement, represented by the blue section. The group, comprising 22%, "Agree" with the statement, shown in orange. 46% of the respondents are "Neutral," indicated by the grey section. 17% "Disagree" with the statement, represented by the yellow segment. 1% "Strongly Disagree," which is shown in the dark blue segment for this category in the chart.

Overall, the data show that most students' view about incorporating ideas or techniques learned from digital media platforms into their creative writing are neutral while the second largest group represented by the orange color agree with the statement mentioned above.

Q. NO: 4; *After engaging with creative writing content on digital media, I reflect on or discuss what I've learned?*

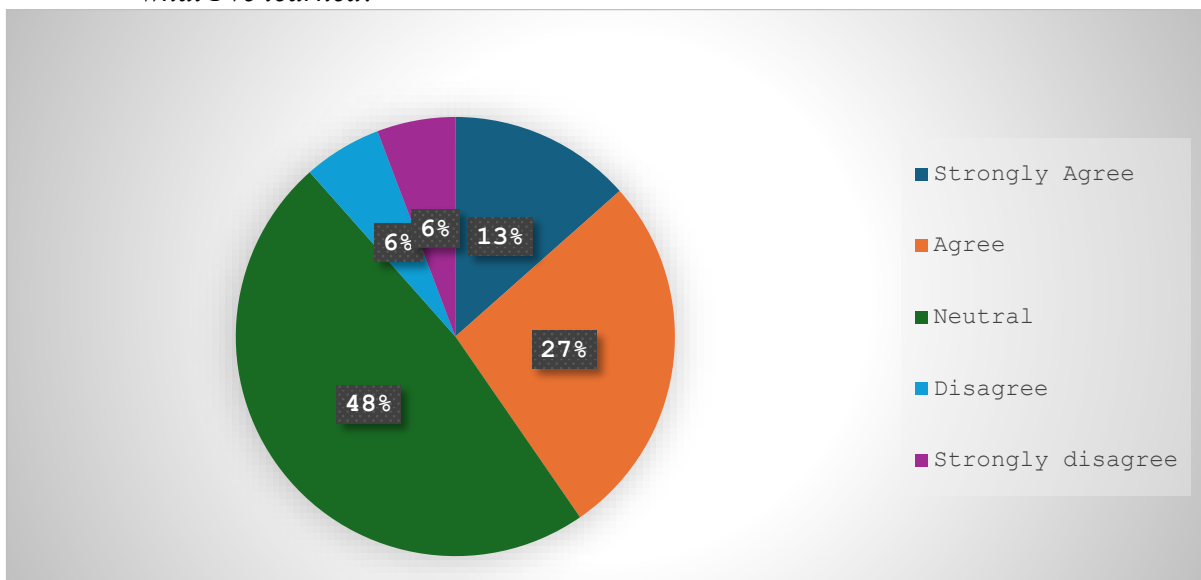


Figure 4.4

This pie chart illustrate the engagement and reflection of creative writing content on digital media. The data is segmented into five categories;

The 13% of the respondents "Strongly Agree" with the statement, represented by the blue section. The group comprising 27%, "Agree" with the statement, shown in orange. 48% of the respondents are "Neutral," indicated by the grey section. 6% "Disagree" with the statement, represented by the yellow segment. 6% "Strongly disagree," which is shown in the dark blue by the absence of a segment in the chart.

Again, the data shows that most of the students' opinion about the reflection after coming up with creative content on digital media is neutral and the second largest group agree with the statement.

Q. NO: 5; *I remember and retain creative writing techniques or ideas learned from digital media over time?*

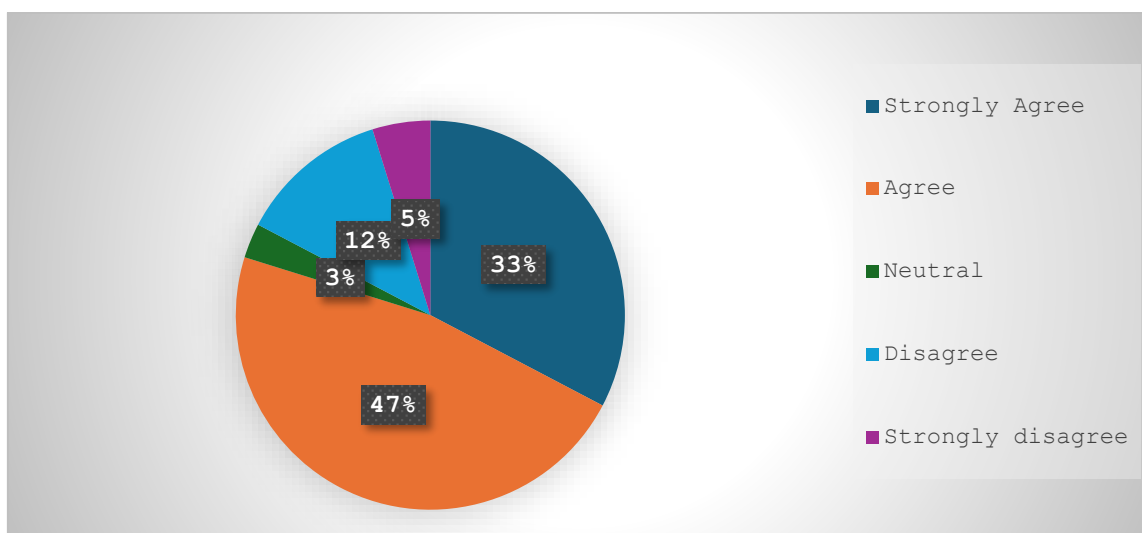


Figure 4.5

This pie chart illustrates the remembering and retaining of creative writing techniques learned from digital media over time. The data is segmented into five categories;

The 33% of the respondents "Strongly Agree" with the statement, represented by the blue section. The largest group, comprising 47%, "Agree" with the statement, shown in orange. 3% of the respondents are "Neutral," indicated by the grey section. 12% "Disagree" with the statement, represented by the yellow segment. 3% "Strongly Disagree," which is shown in the segment in the chart.

The data shows that many students remember and retain creative writing techniques or ideas learned from digital media over time. And hence most of the students agree and strongly agree with the statement given in the chart.

Q. NO: 6; *I perceive the influence of digital media on your creative writing skills overall.*

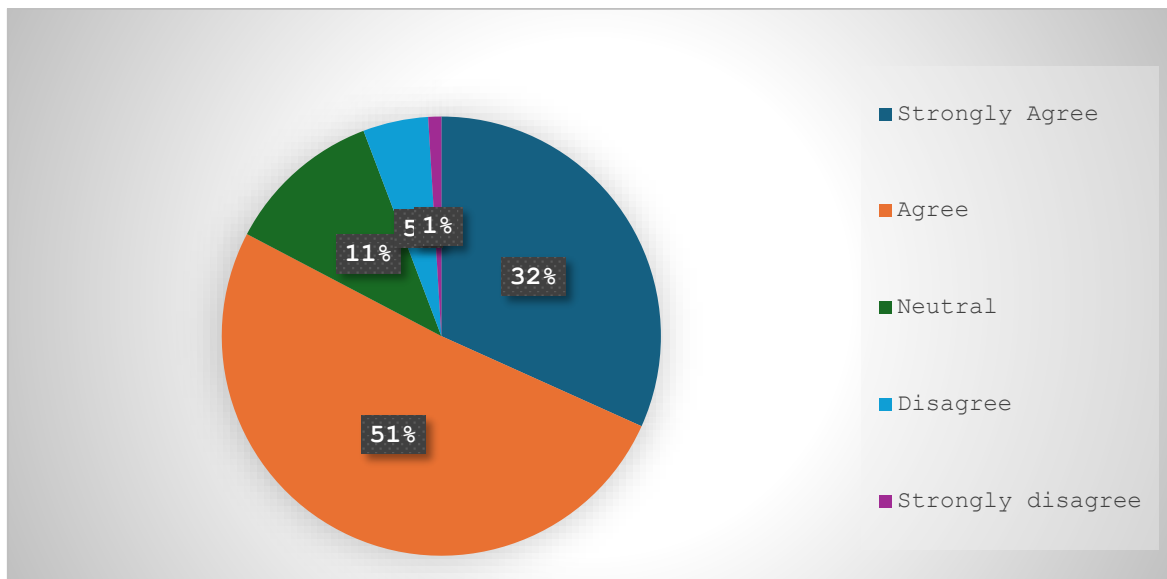


Figure 4.6

This pie chart illustrates the influence of digital media on creative writing skills overall. The data is segmented into five categories;

The 32% of the respondents "Strongly Agree" with the statement, represented by the blue section. The largest group, comprising 51%, "Agree" with the statement, shown in orange. 11% of the respondents are "Neutral," indicated by the grey section. 5% "Disagree" with the statement, represented by the yellow segment. 1% "Strongly disagree," which is shown by the dark blue segment in the chart.

Overall, most of the students agree with the statement about the perception of the influence of digital media on your creative writing skills overall.

Q. NO: 7; *I have adapted my creative writing process based on techniques or strategies learned from digital media platforms.*

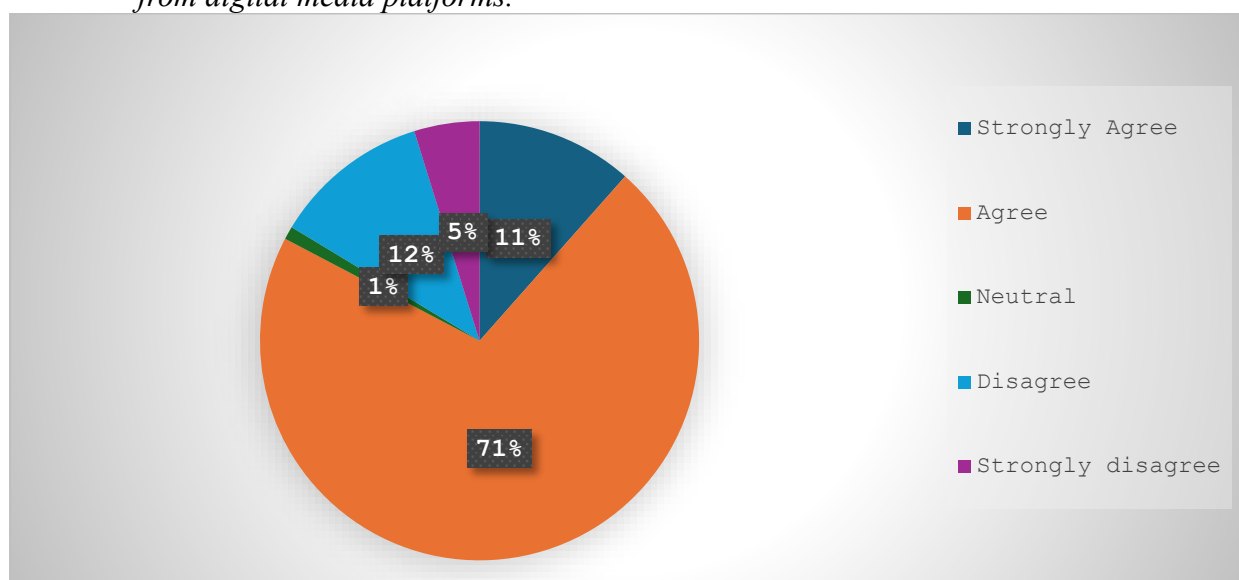


Figure 4.7

This pie chart illustrates the adaptation of creative writing process based on techniques or strategies learned from digital media platforms. The data is segmented into five categories.

The 11% of the respondents "Strongly Agree" with the statement, represented by the blue section. The largest group, comprising 72%, "Agree" with the statement shown in orange. 1% of the respondents are "Neutral," indicated by the grey section. 12% "Disagree" with the statement, represented by the yellow segment. 5% "Strongly disagree," which is shown in the dark blue segment for this category in the chart.

Most of the students agree with the adaptation of creative writing process based on techniques or strategies learned from digital media platforms. This is the largest group in the chart that agree with the statement.

Analysis of Quantitative Data

The analysis of quantitative data presents the relationship between digital media usage and the creative writing skills of undergraduate students at the University of Malakand. For this the data were collected through adapted questionnaires from 100 students and analyzed using statistical techniques.

The findings reveal a nuanced relationship between digital media usage and creative writing proficiency. Descriptive statistics indicate that a significant proportion of students frequently use digital media for both academic and recreational purposes. Correlation analyses demonstrated that moderate use of digital media is positively associated with higher scores in creative writing tasks, suggesting that exposure to diverse content and ideas via digital platforms can enhance creativity.

However, the analysis also identified potential negative impacts associated with excessive digital media usage. Specifically, students who reported high levels of digital media usage exhibited lower levels of sustained attention and proficiency in their writing suggests that overreliance on digital media may impede the development of comprehensive and thoughtful written content.

Furthermore, regression analysis indicated that students who balanced digital media use with traditional writing practices achieved the highest creative writing scores. The findings suggest that a balanced approach, integrating digital media with conventional writing exercises, proved effective for enhancing creative writing skills.

To sum up, quantitative data underscore the importance of balanced digital media consumption. While digital media can provide valuable resources and inspiration for creative writing, it is crucial to manage its use to avoid potential drawbacks. These findings have significant implications for educational practices, advocating for the integration of digital media literacy into the curriculum to help students harness the benefits of digital media while mitigating their challenges.

Analysis of Qualitative Data

To answer question no 2, how does social media influence students' creative writing ideas and inspiration? All interviews from both groups were transcribed and analyzed using thematic analysis technique.

To begin the analysis of the data from students' interview, this study adopted thematic analysis because this analysis method attempts to identify pattern and themes in the data. According to Marks and Yardley (2004), thematic analysis provides analysts with the opportunity to know the potential issue or issues more broadly. Namey et al. (2008) said, "Thematic moves beyond counting explicit words or phrases and focuses on identifying and describing both implicit and explicit ideas. Codes developed for ideas or themes are then applied or linked to raw data as summary markers for later analysis, which may include comparing the relative frequencies of themes or topics within a data set, looking for codes, or graphically displaying code

relationships.” (p.138). Thus, this analysis allows for defining the relationships between concepts and to compare them with the replicated data. The influence of digital media on the creative writing skills of undergraduate students is a multifaceted area of study that requires a thorough examination of students' experiences, perceptions, and practices. Through qualitative data analysis, we aim to explore the various ways in which digital media impacts students' creative writing processes, from inspiration to skill development.

Thematic Analysis

Thematic analysis, a method proposed by Braun and Clarke (2006), was employed to analyze the qualitative data collected from interviews with undergraduate students. The analysis process involved five iterative steps: data familiarization, code generation, theme identification, theme refinement, and defining the themes.

Step 1: Data Familiarization

The recorded interview data were transcribed and thoroughly reviewed by the researcher to become familiar with the content. Initial impressions were noted, such as students attributing improvements in their writing skills to collaborative activities facilitated by digital media platforms.

Step 2: Code Generation

Codes were generated to categorize segments of the data relevant to the research questions. Codes were developed iteratively, focusing on concepts such as collaborative learning, challenges with digital distractions, and the role of digital media in skill enhancement.

Step 3: Theme Identification

The themes were identified by grouping related codes together to capture broader patterns in the data. Themes such as "Collaborative Learning through Digital Media" and "Skill Enhancement through Practice" emerged from the analysis, reflecting different aspects of students' experiences with digital media in creative writing.

Step 4: Theme Refinement

Themes were refined and modified to ensure coherence and representativeness. Sub-themes were identified within larger themes, such as "Peer Feedback and Idea Exchange" within the theme of collaborative learning. The researcher consulted with a colleague to ensure the validity and reliability of the identified themes.

Step 5: Defining the Themes

The final step involved defining the themes and sub-themes to articulate the essence of each concept. Themes were refined to capture the core ideas represented in the data, providing insights into the various ways digital media influences students' creative writing skills.

Table of Themes

Theme	Description
Collaborative Learning Through Digital Media	Students engage in peer feedback and idea exchange through online platforms, contributing to skill development.
Skill Enhancement Through Practice	Practice facilitated by digital media platforms leads to improvements in students' creative writing abilities.
Challenges with Digital Distractions	Students face difficulties managing time effectively and navigating distractions when using digital media for writing.

Themes: Collaborative Learning through Digital Media

One recurring theme that emerged from the interviews was the role of digital media in facilitating collaborative learning experiences among students. Many participants highlighted the value of peer feedback and idea exchange through online platforms, emphasizing how engaging with peers digitally contributed to their skill development in creative writing. One student said, "I find that sharing my writing with classmates on digital platforms helps me receive diverse feedback, which ultimately improves my writing." However, some students also acknowledged challenges in managing time effectively when using digital media, noting that distractions often hindered their productivity during the writing process.

This excerpt provides a glimpse into the thematic analysis process and highlights one of the key themes identified in the study: collaborative learning through digital media. Through the iterative process outlined in the five steps of thematic analysis, the researcher was able to uncover valuable insights into the influence of digital media on students' creative writing skills.

Results and Discussion

The section is divided into two main sections: the results of the quantitative and qualitative analyses, followed by a comprehensive discussion that interprets these findings in the context of existing literature and the theoretical framework of the Atkinson and Shiffrin Model of Information Processing (1968).

Summary of major Findings

This research aimed to explore the impact of digital media on students' creative writing, focusing on their engagement, adaptation, and perception of digital media platforms. The study's findings reveal significant insights into how digital media influences creative writing practices among students.

1. **High Engagement with Digital Media:** The majority of students reported frequently engaging with digital media platforms for creative writing inspiration. This underscores the importance of digital media as a resource for creative ideas and information gathering.
2. **Active Engagement and Reflection:** While many students actively engage with creative writing content on digital media, a notable portion remains neutral or passive. This indicates diverse engagement levels and suggests opportunities for further encouraging active participation.
3. **Incorporation of Digital Media Techniques:** Students often incorporate techniques and ideas from digital media into their creative writing, though a significant number remain neutral. This highlights the potential for educational strategies to facilitate more effective integration of digital media into writing processes.
4. **Retention and Reflection:** A majority of students remember and retain creative writing techniques learned from digital media. However, reflection and discussion about these techniques are areas where more emphasis could be beneficial.
5. **Perceived Influence on Creative Writing Skills:** Most students recognize the positive influence of digital media on their creative writing skills, suggesting that digital media is an effective tool for skill enhancement.

6. **Adoption of New Strategies:** Many students have adapted their writing processes based on digital media techniques, indicating a high level of integration of digital strategies into personal creative processes.

Achievements of Research Objectives

The research successfully met its objectives:

1. **Exploring Students' Views:** The study provided a comprehensive understanding of students' perspectives on the impact of digital media on their creative writing. The findings highlight the perceived benefits and drawbacks, offering valuable insights for educators and policymakers.
2. **Identifying the Impact on Writing Processes:** The research identified how digital media affects students' writing processes and creativity. The findings reveal that digital media plays a crucial role in providing inspiration, enhancing engagement, and promoting the adoption of new writing techniques.

Overall Graph Analysis

The quantitative results, derived from the analysis of the 100 completed questionnaires, provide statistical insights into the relationship between digital media usage and creative writing proficiency. This section includes descriptive statistics, correlation analyses, and other relevant statistical tests to identify significant patterns and relationships. The qualitative results, based on the thematic analysis of the 15 in-depth interviews, offer a richer, more nuanced understanding of how students perceive and experience the impact of digital media on their creative writing skills. These findings highlight individual differences, contextual factors, and the subjective experiences of the students.

Overall Graph:

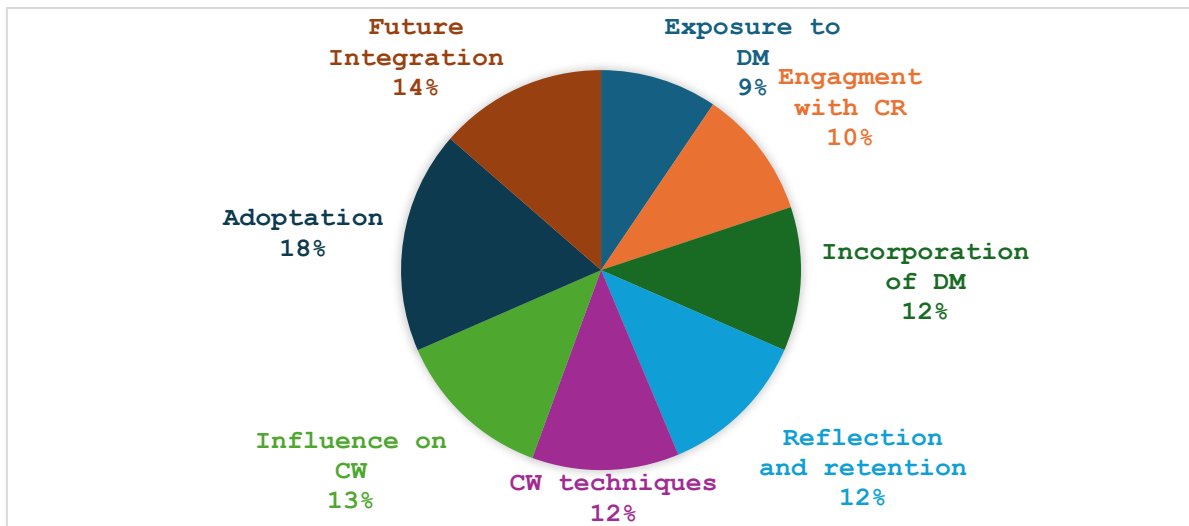


Figure 5.1

Engagement with Digital Media for Creative Writing Inspiration

The data, as illustrated by the pie chart, reveals the following distribution among respondents regarding their engagement with digital media for creative writing:

- 25% "Strongly Agree"
- 38% "Agree"
- 18% "Neutral"
- 19% "Disagree"
- 0% "Strongly Disagree"

Overall, a majority of students (63%) acknowledge some level of engagement with digital media platforms for creative writing purposes.

Active Engagement with Creative Writing Content on Digital Media

The responses indicate:

- 10% "Strongly Agree"
- 38% "Agree"
- 41% "Neutral"
- 10% "Disagree"
- 3% "Strongly Disagree"

The data reveals a balanced distribution of responses, with 48% of students agreeing that they actively engage with creative writing content. The large neutral percentage (41%) suggests that many students may engage passively or selectively, indicating a need for strategies to encourage more active participation in digital content engagement.

Incorporating Ideas from Digital Media into Creative Writing

The chart shows:

- 14% "Strongly Agree"
- 22% "Agree"
- 46% "Neutral"
- 17% "Disagree"
- 1% "Strongly Disagree"

The data suggests that while some students (36%) find digital media a valuable resource for creative techniques, a significant portion (46%) does not actively apply these ideas, indicating an area for educational intervention to bridge this gap.

Reflection and Discussion of Creative Writing Content from Digital Media

The responses show:

- 13% "Strongly Agree"
- 27% "Agree"
- 48% "Neutral"
- 6% "Disagree"
- 6% "Strongly Disagree"

The data indicates a predominant neutrality (48%) regarding reflection or discussion of digital content, with 40% agreeing. This suggests that while a considerable number of students engage in reflective practices, nearly half do not, highlighting a potential area for fostering deeper engagement and critical thinking skills.

Retention of Creative Writing Techniques from Digital Media

The chart illustrates:

- 33% "Strongly Agree"
- 47% "Agree"
- 3% "Neutral"
- 12% "Disagree"
- 3% "Strongly Disagree"

A majority of students (80%) affirm that they retain creative writing techniques learned from digital media, underscoring the effectiveness of digital media as a learning tool for creative writing.

Perceived Influence of Digital Media on Creative Writing Skills

The responses reveal:

- 32% "Strongly Agree"
- 51% "Agree"
- 11% "Neutral"
- 5% "Disagree"
- 1% "Strongly Disagree"

An overwhelming majority (83%) of students perceive a positive influence of digital media on their creative writing skills, indicating its broad recognition as a beneficial tool for enhancing writing skills.

Adaptation of Creative Writing Process Based on Digital Media

The data shows:

- 11% "Strongly Agree"
- 72% "Agree"
- 1% "Neutral"
- 12% "Disagree"
- 5% "Strongly Disagree"

A significant majority (83%) agree that they have adapted their writing process based on digital media techniques, highlighting the high level of integration of digital strategies into personal creative processes.

Overview of Engagement with Digital Media

The pie chart provides an overview of how students engage with digital media in the context of creative writing:

- **Exposure to Digital Media (DM):** 9%
- **Engagement with Creative Resources (CR):** 10%
- **Incorporation of DM into writing:** 12%
- **Reflection and retention:** 12%
- **Creative Writing (CW) techniques learned:** 12%
- **Influence on CW skills:** 13%
- **Adoption of new strategies:** 18%
- **Future Integration and application:** 14%

The distribution reflects that students' primary activities revolve around adopting new strategies (18%) and recognizing the influence of digital media on their creative writing skills (13%). While a considerable portion of students actively engage with digital media and incorporate new techniques, there is a balanced focus on reflection, retention, and the future integration of these techniques. The data suggests that digital media is an integral component of the creative writing process for many students, influencing their learning and application of new writing strategies.

Future Recommendations

Based on the findings, several recommendations can be made to enhance the integration of digital media into creative writing education:

1. **Encourage Active Engagement:** Educators should develop strategies to encourage more active engagement with digital media content. This can include interactive assignments, discussions, and reflections on digital media-based creative writing exercises.
2. **Facilitate Integration of Techniques:** Educational programs should focus on facilitating the integration of digital media techniques into students' writing processes. Workshops, tutorials, and practical sessions can help students effectively apply these techniques.
3. **Promote Reflective Practices:** To enhance retention and deeper understanding, educators should promote reflective practices. This can involve journaling, peer discussions, and analytical exercises related to digital media content.
4. **Leverage Digital Media's Influence:** Recognizing the positive influence of digital media, educational institutions should leverage these platforms to enhance creative writing skills. This can include incorporating digital media-based assignments and projects into the curriculum.
5. **Address Diverse Engagement Levels:** To cater to diverse engagement levels, personalized learning approaches can be implemented. This includes providing tailored resources and support to students based on their engagement and proficiency with digital media.
6. **Further Research:** Continued research is necessary to explore specific digital media tools and their direct impact on creative writing outcomes. This can help in identifying the most effective strategies and tools for enhancing creative writing skills.

Conclusion

This study underscores the significant impact of digital media on students' creative writing. The findings highlight the importance of digital media as a resource for inspiration, engagement, and skill enhancement. By encouraging active engagement, facilitating the integration of digital media techniques, promoting reflective practices, leveraging digital media's influence, addressing diverse engagement levels, and conducting further research, educators can effectively harness the potential of digital media to enhance creative writing education.

The analysis demonstrates that digital media significantly impacts students' creative writing processes. A majority of students engage with, reflect on, and incorporate ideas from digital platforms, acknowledging their influence on their writing skills. These findings suggest that educational strategies should continue to integrate digital media to enhance creative writing skills effectively. Further research could explore specific digital media tools and their direct impacts on creative writing outcomes.

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