

# Interference of digital teaching materials on the ability to draw illustrations of Generation Z

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**Abstract.** This article describes the results of a comprehensive study regarding the interference of the development of digital teaching materials on the ability to draw illustrations of the Z generation who are very closely connected to gadgets. Current advances in information technology have a broad influence on the development of the abilities and skills of the younger generation in creating art. Technological innovations in learning media that are spread through virtual world networks have a big impact on the skills that students are interested in. The method used is an explanatory mixed method with library research, questionnaires and field studies by observing trends in ability to draw illustrations from teaching materials which are a source of learning for Generation Z. The research results show that Generation Z's ability to draw illustrations is greatly influenced by teaching materials available from social media which are very close to their lives. Still images (stop moments) and drawing tutorials are the most influential choices in improving understanding and drawing skills. In the process of creating illustration images, Generation Z feels very spoiled with very varied choices from various sources of teaching materials which are generally easy to follow. The results of this study are useful both empirically, theoretically and practically in drawing illustrations by utilizing learning resources from digital teaching materials available in cyberspace with media devices that can be selected according to interests and using digital technology drawing media.

## 1 Introduction

This article describes the results of a comprehensive study through research on the interference of the development of digital teaching materials on the ability to draw illustrations of the millennial generation who are very close to gadgets. Current advances in information technology have a broad influence on the abilities and skills of the younger generation in creating art. Innovations in learning media technology spread through social media networks make it easy to access various information that supports drawing practice. Generation Z, who were born when information technology developed rapidly, is a generation that can easily get references to learn anything on social media.

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Generation Z is the internet generation who utilizes the use of the internet and technology to fulfill their life needs. Setiaji [1] said that along with the development of digital technology, digital art is increasingly in demand and increasingly popular. The results of research entitled "The Impact of the Increasing Popularity of Digital Art on the Current Job Market for Artists" show that the number of digital artist jobs is increasing over time. For generation Z, technology and information are very close to their lives because they were born when information technology was very rapidly taking over everyday life. The internet network is very extensive, making it easier for generation Z to access various information through gadgets that are very popular in their time. Because of the ease of finding information through gadgets, there are many things that can be learned, including learning to draw. Anna Sungkar [2] believes that the key to success in art in the millennial era is how we can adapt to digital technology based on the internet and computers

Anggraeni [3] quoted Wardana's definition of digital drawing, namely a drawing technique using computer software to produce images in vector form. Digital teaching materials are digital devices that can be accessed via the internet with the help of cellphones, computers and other devices as learning products resulting from technological advances, becoming an alternative solution for increasing the knowledge and skills of generation Z who are very close to gadgets. Digital learning leads to the optimization of multimedia devices in various forms such as images, films/videos, animations, scripts/manuscripts and so on. Hendriyanto and Rokhman [4] said the learning media is packaged in an Android-based application to make it easier for students to access because Android is currently often used by students.

Digital teaching materials are very easy to find for generation Z who want to learn drawing lessons. Learning to draw does not require room or class facilities because it can be studied in various conditions and opportunities anywhere at any time. Generation Z can search for and store digital teaching materials as long as they have data space capacity in their cellphone or computer hardware and an internet network is available. Because in the form of soft files, the storage device becomes flexible and easy to carry anywhere so it is easy to access it. Learning to draw illustrations which requires practicing drawing by looking at examples of pictures and videos will be made easier by the availability of digital teaching materials, especially as these photos and videos can be shown repeatedly. According to Wardana et al [5], in the process, to create digital drawings, it is best to be supported by manual drawing skills. The hypothesis shows that there is a significant relationship between the ability to draw manually and the ability to draw digitally.

## **2 Research methods**

The method used is an explanatory mixed method. According to Sugiyono [6], a combined research method is a research method that combines or combines quantitative methods and qualitative methods to be used together in a research activity, so that more comprehensive, valid, reliable and objective data is obtained.

The data was collected using literature studies, questionnaires and field studies by observing trends in ability to draw illustrations from teaching materials which are generation Z's learning sources. Collecting data from questionnaires is needed to further

strengthen conclusions because the answers to the objects studied from the questionnaire questions will ensure measurable, reliable and valid answers. The samples taken were Visual Communication Design students who were born during the birth span of generation Z from 5 classes, namely the class of 2018, 2019, 2020, 2021, 2022, totaling 102 people. Quantitative data from the questionnaire answers will be described by looking at the phenomenon of student image creation and supporting references.

### **3 Results and discussion**

The increasingly rapid development of science and technology has an impact on the form and characteristics of teaching materials. E Kosasih [7] explained that teaching materials do not just stop in the form of static PDF presentations. In subsequent developments, digital teaching materials were then developed into interactive teaching materials, namely by utilizing multimedia facilities available on computers. It is called multimedia because it combines two or more media, in the form of text, sound, images, animation, audio and video with tools and connections (links). With these multimedia devices, users can surf (search), interact, create and communicate.

Research on the interference of the development of digital teaching materials on generation Z's ability to draw illustrations shows that teaching materials spread on social media greatly influence generation Z's drawing ability. Gadgets as devices that are close to the lives of Generation Z play a role in making it easier to learn knowledge and learn to draw which is often published on social media networks. Various learning options, both still images (stop moments) and tutorial learning, are the media most often chosen for learning to draw. Efforts to improve understanding and drawing skills cannot be instant, but require a continuous process so that drawing practice achieves the desired results. The process of creating drawings with more and more references from the virtual world with increasingly better quality really helps educators to improve the quality of drawing learning.

The research results show that the learning sources that make Generation Z interested and encouraged to learn about human images as the image objects most often depicted in illustrations are examples of images on social media networks (Pinterest and other social media networks) reaching 41.2%; cartoon/animated films or anime up to 25.5%; reading books such as comics, manga, webtoons reached 22.5%. Examples of images on social media networks as magnets that attract interest in learning to draw are proven by the highest percentage results, followed by cartoon/animation films, anime and reading books such as comics, manga, webtoons.

Sources that enable Generation Z to draw show results that the role of image examples on social media networks (Pinterest and other social media networks) reached 38.2%, and tutorials on how to draw on social media networks (YouTube, TikTok and so on) 34.3%. Both sources contribute almost the same percentage to improving the drawing skills of Generation Z students. Examples of drawings that play a slightly superior role compared to tutorials prove that good drawing examples create a high attraction for generation Z to learn to draw.

Current advances in information technology have a broad influence on the development of Generation Z's abilities and skills in creating fine arts, especially drawing

illustrations. The most frequently followed social media networks for learning to draw illustrations are examples of images on social media networks (Pinterest, and other social media networks) reaching 53.9% and tutorials on how to draw on social media networks (Youtube, TikTok and so on) reaching 40.2%. Meanwhile, only a few people choose cartoon/animated films, anime and reading books such as comics, manga, webtoons.

In terms of ease of following drawing exercises, the choice that has the most influence in increasing the understanding and ability in drawing for Generation Z is still images (stop moments) on social media networks such as Pinterest reaching 43.1% and learning videos on YouTube and Tiktok reaching 41.2%. % . Meanwhile, there are only a few comics, Manga (webtoon) and animated films, anime, cartoons and other sources.

The choices most frequently viewed and used as references for drawing practice for generation z are images (Pinterest & other networks) reaching 54.9% and Video Tutorials (Youtube) and images (Pinterest & other networks) reaching 28.4%, while ebooks are only 7.8%. Pictures are the most recommended choice for drawing practice compared to drawing video tutorials or ebooks. The interesting picture turns out to be so fascinating to look at and can be used as a reference in drawing practice.

With online digital learning resources on social media networks, in the process of creating illustration images, you feel very spoiled with very varied choices from various sources of teaching materials which are generally easy to follow and access. Generation Z's opinion shows that the existence of online digital learning resources on social media networks makes it easier to learn, reaching 22.5%; The existence of online digital learning resources on social media networks is interesting to follow and the existence of online digital learning resources on social media networks can increase the ability to draw illustrations by 9.8% respectively; as well as the existence of online digital learning resources on social media networks that can be used as a teacher/instructor in the field of drawing, it is also believed to be true so that those who think all the statements above are considered true reached 55.9%.

The preferred drawing technique when drawing illustrations depends on your habits and abilities. Because Generation Z was born in the digital era, digital drawing techniques are the highest technique, reaching 24.5%. Hybrid drawing, a combination of manual and digital drawing techniques reached 22.5%. Drawing manually and adjusting depending on the object being drawn each reaches 13.7%. Meanwhile, 25.5% chose to like all techniques, both digital and manual.

Drawing illustrations usually involves drawing humans. Drawing humans is the most dominant object in drawing illustrations. The most dominant source of knowledge that plays a role in humans' ability to draw is examples of images on social media networks such as Pinterest and other social media networks, reaching 39.2%. Drawing tutorials on social media networks such as YouTube, TikTok and so on are in second place along with the role of fine arts teachers, each of which reaches 22.5%. Reading books such as comics, manga, webtoons reached 9.8%, followed by cartoon/animated films, anime.

Currently, learning to draw can use the facilities spread on social media with all their advantages. Gadgets that are always attached to the lives of Generation Z easily access various sites to learn to draw. Research shows that the advantage of learning to draw through social media networks in the form of videos such as YouTube, TikTok and so on is that the learning is easy to follow and can be repeated repeatedly with respondents'

choice reaching 40.2%; Having a variety of sources and a variety of topics so that you can choose according to what you want to learn reached 28.4%; and the respondents agreed with the two statements, plus the explanation was quite clear and detailed and the speaker (tutor) was a professional who had high skills in drawing up to 26.5%.

The advantages of learning to draw through social media networks are examples of drawings such as on Pinterest and other social media networks, showing that the drawing examples are interesting and high quality, have many choices of drawing objects, have many choices of media used, have many choices of drawing styles, achieve 52%. Having a large selection of image objects reaches 18.6%; The sample images are attractive and of 15.7% quality; Has a large selection of image styles 11.8%

The results of this research concluded that Generation Z, which was born when communication technology such as the internet and gadgets were very closely linked to their lives, greatly influenced the way they learned things, including drawing. Munandar Sulaeman looked at the synergy between science and technological progress. The feedback process occurs between science and technology in the engineering process, because science gives color and power to technology. On the other hand, technological results provide new input to science. When technology becomes sophisticated, the relationship between science and technology becomes closer. So that technology is not only a tool for science, but also fosters motivation and direction for theory and research [8].

In the current era of communication technology, teaching materials are available in cyberspace, very diverse and global in nature. This difficult situation requires us to choose and sort out the multi-media works that are deemed appropriate for application, as Dharsono said. Multi-media works provide multiple possibilities for highlighting traditional idioms that are full of pluralist cultural teachings as offering alternative interpretations, which are able to provide various universal meanings in terms of life [9].

## **4 Conclusion**

Learning and teaching are transformed, changing forms, adapting to developments in learning technology that shape the characteristics of generations living in their time. Generation Z, who live in the era of communication technology which is very close to the internet and gadgets, has a very strong influence in pursuing learning. This research proves that Generation Z's drawing ability is greatly influenced by the information available on social media which is often used as a learning medium. Still image media such as Pinterest and the like have the highest influence, followed by tutorial media in the form of video, animation, comics, manga and other media. The results of this research indicate that there must be adjustments in learning strategies where knowledge from social media is difficult to contain and should become a value that can be utilized. The contribution of knowledge on social media synergizes with the learning characteristics of Generation Z who often adventure in cyberspace on their gadgets. It is very important to adapt learning methods, methods and strategies for generation z so that learning is effective and on target.

The results of this research are useful both empirically, theoretically and practically in drawing illustrations by utilizing learning resources from digital teaching materials on

social media with learning tools that are closely used by generation z so that educators make adjustments in their learning strategies.

## References

1. R.S. Setiaji, Berkarya seni visual di era digital. *Visual Heritage: Jurnal Kreasi Seni dan Budaya*, **5**, 272-280 (2023)
2. A. Sungkar, Digital Art. *Dekonstruksi*, **9**(02), 32-41(2023)
3. E.B. Anggraeni, Pembelajaran Menggambar Dengan Teknik Digital Pada Beginner Class di Ageru Art Studio. *Qualia: Jurnal Ilmiah Edukasi Seni Rupa dan Budaya Visual*, **3**(1), 8-13 (2023)
4. N. Hendriyanto, N. Rokhman, Development of Android-Based Digital Drawing Learning Media Using Online Applications. *Edukasi*, **15**(2), 110-119 (2021)
5. P.D. Wardana, M. Muhajir, Hubungan Kemampuan Menggambar Ilustrasi Secara Manual dengan Kemampuan Menggambar Ilustrasi secara Digital. *Jurnal Pendidikan Seni Rupa*, **3**(3), 43-51 (2015)
6. Sugiyono, *Metode penelitian kuantitatif, kualitatif, dan kombinasi (mixed methods)*, (Alfabeta, Bandung, 2020).
7. D.S. Kartika, *Seni Rupa Modern*, (Rekayasa Sains, Bandung, 2017).
8. M. Sulaeman, *Ilmu Budaya Dasar dan Ilmu Sosial Budaya Dasar*. *Social Culture*, (PT Refika Aditama, Bandung, 2018)
9. E. Kosasih, *Pengembangan Bahan Ajar*, (Jakarta Timur, 2021)