CREATING E-COMIC TO MOTIVATE STUDENTS TO LEARNING MANDARIN

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ABSTRACT

The research explored whether digital comic books were a new learning method that could increase learning motivation in learning Mandarin. Illustrated learning media made it easier for students to understand learning material. Along with the times and technological advances, learning methods had also developed in various ways. The questions in the research were: (1) How was the application of e-comic in learning Mandarin?; (2) What did students think about learning with e-comic? The research applied a qualitative method, and 40 students who studied Mandarin were the respondents. Based on the results, it can be concluded that all respondents agree that applying learning media using digital comic books can provide positive results in learning Mandarin. All respondents think learning through e-comic makes it easier to understand grammatical material and helps compose sentences to construct conversations. Learning with comic book media is considered very interesting. Even though the learning process using comic book media occurs online during the pandemic, learning with comic book media can create interactive learning. Students can become more creative and able to use various applications to make their own comics with the characters they choose. Learning with comic books can motivate students to learn Mandarin.

Keywords: e-comic, learning apps, student motivation, learning Mandarin

INTRODUCTION

Learning media is an important part of teaching and learning activities. Learning media designed according to students' needs can help them obtain information more quickly and optimize their enthusiasm for learning. Along with technological advances, learning methods have also developed in various ways. In recent years, learning, media, and technology have become key to critical studies of education and technology.

The rapid switch to online education might support educators in making the best of this new educational emergency (Williamson, Eynon, & Potter, 2020). However, Applying creativity while teaching can be challenging as teachers struggle with presenting the target language and/or context to their learners in a stimulating and engaging manner (Kohnke, 2019).

One of the learning media is comic book reading. Learning through comic intermediaries is the best way to encourage students to think creatively. Comic books are applied to medical science by asking students to read long comics about medical. After this, the students create their own stories about medical skills and attitudes using comic formats. These include empathy, communication, and clinical reasoning. Along with technological developments, learning can also be done by using applications. One of the creativity in language learning applications is through digital comic books. A digital comic book is an illustrated comic work created using digital devices and media. Digital comics are a form of illustrated animated dialog stories with various characters. Digital comic book learning media is used to achieve effective learning.

To increase student learning motivation, there are innovations in learning and teaching methods,

especially digital learning. Digital learning has been proven to have an impact on students' learning outcomes, and it can provide an alternative for teaching innovation in the classroom. With the advancement of information technology and relevant technologies, digital learning will be embraced by both students and teachers (Andreani & Ying, 2019; Anisah, Aziz, & Bowo, 2021).

Learning Mandarin is not only to understand vocabulary and grammar but also to understand how to apply it in communication. The four language skills include the ability to read, listen, write, and speak, as well as in learning Mandarin, these four skills need to be learned. A plethora of studies have been conducted to address the issue of Chinese character recognition. Numerous frequently employed Chinese characters form the primary challenge when acquiring proficiency in Chinese character learning (Ying, Mursitama, & Novianti, 2018). Nevertheless, by scrutinizing the structural traits of Chinese characters and the principles governing their usage, it can be observed that most Chinese characters consist of two or more components (Lin, Lim, & Wu, 2022).

Chua et al. (2020) have found that Mandarin learners have problems with pronunciation, intonation, grammar, characters, vocabulary, oral communication, presentation, and composition. The most challenging is learning Chinese characters. Researchers have stated that technology creates a positive effect that enhances the learners' achievement. The advantages of mastering Mandarin as a foreign language may increase competence among students in working fields in the future, especially those who can communicate in Mandarin well.

In Indonesian higher education cases, Mandarin teachers are trying to develop various ways to motivate students to communicate in Mandarin and learn Chinese characters, one of which is digital comics. Before implementing learning with digital comics, an initial survey is conducted. In February 2023, researchers conducted an initial survey of 20 students regarding the application of digital comic books in learning Mandarin conversation for university students. The G-form survey is sent via Line and WhatsApp to 20 students, and they find that using digital comic books to learn Mandarin is very helpful in understanding and using this vocabulary in constructing dialogue sentences. In addition, digital comic books are considered more fun and innovative in conversational learning.

The initial researchers conclude that learning using the e-comic method can be a new learning model solution for Mandarin language lessons. So far, learning Mandarin, especially for conversational lessons, has only been through watching films and listening to songs or conversations without using many of the latest learning applications that continue to emerge.

Apart from that, the trend of the younger generation is that innovation has emerged in learning Mandarin using various online comic applications.

All students are required to use the online comic application to compose sentences based on the grammar points given by the teacher. The applications used in production are Snow, Comic-Maker, Comic Strip-comic Maker, MangaName, and Soul-Manga. The questions in this research are: (1) How is the application of M Comic in learning Mandarin? (2) What do students think about learning with e-comic?

According to Payanti (2022), learning media plays an important role in teaching and learning activities. Therefore, learning media provide support for learning success. Learning media designed according to students' needs can help them obtain information more quickly and optimize their enthusiasm for learning; one such learning media is comic book reading. Firmadani (2020) has said there are many ways for teachers to convey learning material through learning media, especially innovative learning media.

This learning media is used to make learning in class not boring for students so that the material can be conveyed properly. With the wider advancement in technology, the teacher is required to develop various kinds of learning media, such as digital comic books.

Utilizing technology in the form of instructional media can be one alternative to addressing the limitations of space and time in the existing learning process. This allows teachers to avoid excessive explanations to students. The user-friendly nature of these media is also expected to be harnessed by senior teachers, thus minimizing oral transmission (Puspitarini & Hanif, 2019).

Social media offers opportunities for young people to harness the power of networking and seek relevant expertise. Existing support structures, such as gamification, stimulate the involvement of young people in the community (Andreani & Ying, 2019). All young people must have the access, capabilities, and skills to use technology effectively and safely to achieve their goals (Williamson, Eynon, & Potter, 2020).

In addition, Hakim (2018) has said that digital comic books are made very simply and have elements of a story sequence that contain messages that are light and easy to understand. However, digital comic books are still presented in a concise and easy-to-digest manner and equipped with verbal language through dialogue. The application of digital comic books as an innovative learning medium, along with technological developments, is very common for millennials in their daily use.

In addition, digital comic books are very easy to access with image files that are not too large compared to other digital media. Digital comic books effectively improve student learning outcomes, and educators have suggested using e-comics in language learning. Based on the results of interactive multimedia digital comic books or e-comic makers, one of the media that interest students is comic books. Students will be more interested in learning because they contain more attractive and colorful displays.

Coding strips are utilized for teaching programming principles, providing convenience for teachers and students during the COVID-19 pandemic. Digital comics are used to support home studies, and the students' worksheet cover design should be captivating to engage students (Saputra & Pasha, 2021; Suh, Lee, & Xia, 2020; Suhono & Sari, 2020).

Students taught using comic learning media achieve higher success rates than those taught without comics. Comics can be used as a literacy medium for children, allowing teachers to develop relevant educational issues independently. Despite using a coded lexicon, COMIC produced significantly more novel captions and longer captions compared to baseline models, demonstrating its potential as a valuable tool for teaching (Damopolii & Rahman, 2019; Kuttner, Weaver-Hightower, & Sousanis, 2021; Radeswandri et al., 2021; Tan, Chan, & Chuah, 2019).

It is stated that children who read at least one comic book a month read the same as textbooks every year; this has an impact on students' reading skills and vocabulary mastery much more than students who do not like comic books. Another advantage of comic books is that they contain strong visual elements and stories. Visualized expressions make the reader emotionally involved so that the reader continues to read it until it is finished. Lestari and Afifah (2021) have developed a digital comic book application that contains learning material in the form of comic books, which includes grammar and vocabulary.

Besides that, practice questions are also presented. The development of digital comics is expected to be able to train high school students' reading, writing, and speaking skills. After going through the revision validation and feasibility testing stages, most students agree that the digital comic book application can help them in the process of learning.

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Gumelar (2010) has outlined that comics are drawn worldwide in four main styles: cartoon style, semi-cartoon style, realism style, and fine art style. The cartoon means cute drawing, which consists of a semi-cranial style. Gumelar (2010) defines a combined realistic and cartoon drawing style as a caricature as the most distinctive feature. However, many other drawing styles depend on the combined realist and cartoon drawing abilities. Realism is a realistic drawing style, where the comic drawing style is made as close as possible to the anatomy and physiology of body posture, face, and human race or animals, plants, and other intelligent creatures. The fine art style is an abstract and realistic drawing style, the sense of art itself without any ties to cartoon, semi-cartoon, realism, perspective, lighting, or shading.

Comics are a design, so comics use elements in the design. According to Gumelar (2010), design elements are materials or parts that make up a comic design in a composition, and the constituent parts are separated into smaller parts. The design elements by Gumelar (2011) define an image as not just a drawing but can also be a photo, illustration, painting, logo, icon, symbol, and others. However, in comics, the image is usually a hand-drawn drawing. This image makes up most of the comic.

Text is an image and symbols or symbols of sounds and numbers. In comics, all sounds (voice, sound, and audio) become text, presented in different shapes according to the common symbols in comics and the meaning according to custom.

METHODS

In Mandarin conversation lessons, students learn grammar and compose sentences and dialogue based on the grammar given. The aim is for students to be able to construct sentences based on the correct grammatical structure from the source language to the target language. Apart from that, it trains students' translation skills. Due to limited space and time to practice Mandarin speaking skills using a learning method in the form of hybrid learning, the teacher comes up with a learning innovation using comics in learning. So that students are able to think creatively and innovatively and adopt the latest technology in completing assignments in conversational learning, students are given the task of designing conversations in comic form.

Students are divided into five groups to carry out conversation assignments using five digital comic creation applications, namely: (1) Snow, (2) Comic Creators, (3) Cartoon Comic Strip Maker, (4) MangaName, (5) Soul-Manga. Through the comics they create, students must be able to use the vocabulary or grammar points requested by the teacher to create dialogue expressed in digital comics. All groups are free to choose the type of application they want to complete the given task.

After students work on digital comics, the teacher gives an assessment in five categories: (1) creativity, (2) innovation, (3) accuracy of tone and pronunciation, (4) fluency in speaking, and (5) the accuracy of the use of words. After the e-comics assignment is completed, the lecturer distributes a questionnaire regarding students' opinions regarding learning through digital comics.

Sampling is conducted by researchers using purposive sampling techniques, namely sampling techniques with certain considerations. Among them, researchers will select samples based on certain characteristics. In this research, the sample standards are determined by the researchers. They are 40 Chinese Department students from the classes of 2023 and 2026 who have completed a digital comic project in a Mandarin conversation course. Then, the researchers identify those 40 students as research subjects and

distribute questionnaires to respondents.

Considering the ongoing pandemic situation in Indonesia, the research is conducted online using existing social media platforms. The research is conducted from January 1 to July 29, 2023 by distributing questionnaires to 40 students. Data collection is carried out in the form of a closed questionnaire. The rating scale used is a nominal scale with only 'yes' or 'no' answers based on a dichotomous scale. Dichotomous scales encourage respondents to provide more precise answers.

The questionnaire is divided into two parts, one of which is distributed to students of the class of 2026. The questionnaire contains ten questions, including opinions, suggestions, and views of students from the Chinese Department. Before answering questions, students will be given a video link to a digital comic that has been entered into Google Forms and created by the Chinese Department students class of 2023 in their speaking class.

RESULTS AND DISCUSSIONS

Students create their digital comic books with a variety of free applications available. The rules for making comic books and comic content are that students are required to use Mandarin vocabulary following the rules made by the teacher, and the theme and subject matter can be determined according to the creativity of each student. The applications used in production are Snow, Comic Creator, Cartoon Comic Strip, and MangaName.

The Mandarin grammar contained in the comic Figure 1 is 因为...而...所以: because... and...so 因为我起得晚，而需要两个小时的路程才能到公司，所以只带上了一个面包和一盒牛奶。(Because I got up late and it took two hours to get to the company, I only brought a piece of bread and a box of milk)先...再 first...then. 我先按照你们的建议去改一下，改完了再给你们看一下。(I will modify it according to your suggestion first, and then I will show you after the modification).

The results of the cartoon design in Figure 1 show that this kind of learning is asynchronous e-learning. The teacher sends material in the form of forums, and students study at different times. This type of spoken language learning is done through conversation, which is an innovation for the millennial generation (Hakim, 2018).

This digital cartoon is created using the Snow app to make a sentence from the words because, while, so, first, and then. In the learning process, it is better to study the use of vocabulary first and then complete the exercises so that skills can be practiced and language skills can be improved. Therefore, learning grammar is also essential to improve Mandarin proficiency.

The Mandarin grammar contained in the comic Figure 2 is 聘用：哪家公司一定会聘用你的。(Some company will hire you.); 渐渐地：渐渐地得到模特儿身材。(Gradually gain a model figure); 特别：我特别羡慕那很瘦与漂亮的女孩儿。(I especially envy that thin and beautiful girl); 只要...一定：只要好好锻炼身体，你一定会得到模特儿的身材。(If you exercise well, you will get the body of a model. I am especially envious of that thin and beautiful girl.)

As can be seen from the results of the cartoon design in Figure 2, this is digital learning delivered in the form of digital media, such as text or images, and this can be learned via the Internet. Therefore, appropriate learning media can support successful learning (Payanti, 2022). This digital comic book, created with the Soul app, draws sentences from these vocabulary words: hire, specials, as long as, certain, and stringing them into conversational sentences.

Figure 1 Snow

Figure 2 Comic Creator

Figure 3 shows that digital comic books can effectively enhance student learning effects, and teachers are advised to use electronic comic books in language learning (Nazhiroh, Jazeri, & Maunah, 2021). The role of grammar in teaching Mandarin can increase the speed of mastery of sentences during the learning process. The digital cartoon in Figure 3 uses the Cartoon Comic Strip Maker application to make sentences from these words: that is, it seems; with that; although... also; even if... also; to form dialogue sentences that meet the grammatical requirements in learning Mandarin.

Figure 3 Cartoon Comic Strip

Chinese is essential. This digital comic book is created using the Cartoon Comic Strip application to convert grammatical vocabulary into a sentence, namely: and... and; from the point of view of...; except...too.

Figure 4 Manga

Figure 5 Digital Comic Strip

The Mandarin grammar contained in the comic Figure 4 is: 又...又：一起学习会让所有的事情又有趣又容易。(Learning together makes everything fun and easy); 从...看来：从长远来看，它将使我们不认真学习。(In the long run, it will make us not study hard); 除了...也：除了有很多挑战，我也觉得课很无聊。(Apart from having a lot of challenges, I also find the class boring).

It can be seen that the learning styles presented through digital comic book media contain strong visual elements and stories, so this has a far greater impact on students' reading skills and vocabulary mastery compared to students who do not like comics (Triono, 2014). From a pedagogical point of view, grammar usually refers to the transitions and rules for constructing sentences in a language, so word order in

The Mandarin grammar contained in the comic Figure 5 is: ...跟/和...（不）一样：你跟小华一样呢，她也喜欢在那儿买面包。 (You are the same as Xiaohua, she also likes to buy bread there.) 是...，就是...：面包贵是贵了一点儿，就是很好吃。/ (It is easy to use, but a bit expensive).

In traditional Mandarin teaching, the lecturer is the center of teaching, and students passively listen; furthermore, the method of delivering lesson content involves merely conveying the material from the book without utilizing technological advancements to enrich the teaching materials and innovate the learning process. This teaching method makes teachers feel bored and students feel pressured. Therefore, as an educator, it is necessary to think of various ways to develop teaching methods to actively cultivate

students' learning abilities and interests and follow principles that make students learn and happy. The analysis results of the opinions of students majoring in Chinese Literature on Digital Comic Book Media in learning Mandarin show that most of the younger generation knows about digital comic books.

Therefore, the presentation of learning material in the form of digital comic books can make learning material more attractive to students (Wahyuni & Lia, 2020). From the questionnaire results, as many as 38 respondents (95%) know about learning to use digital comic book media, and only two respondents (5%) who do not know there is learning to use the media. Based on the results of distributing questionnaires to students who have made digital comics or have used digital comics in learning to eat, media has several benefits, one of which is to provide interesting and interactive learning. It can be seen in Figures 6.
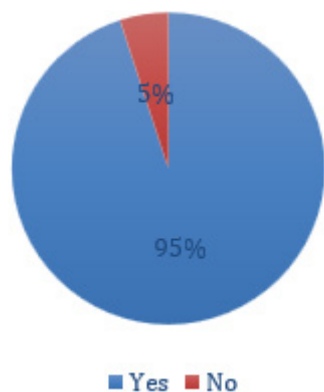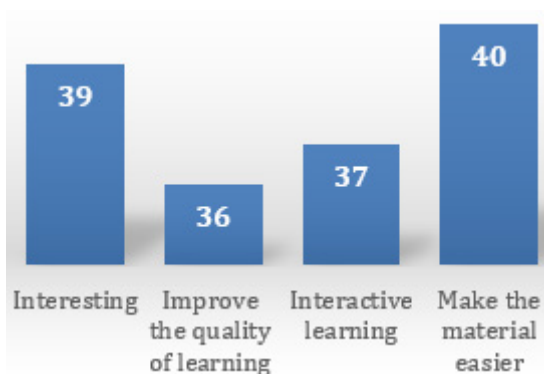

Figure 6 Knowledge of Digital Comic Books

Figure 7 Knowledge of Digital Comic Books

The data obtained from 40 respondents majoring in Chinese Literature illustrates that students feel that learning Mandarin through the medium of digital comic books has a positive influence on learning. The highest percentage of students' views is to facilitate understanding of learning material (100.00% or 40 students), followed by the second highest rate, namely 39 students (97.5%) think that learning with comic book media is interesting, followed by 37 students (92%) who believe that comic book media can create

interactive learning, and 36 students (90%) also think that it can improve the quality of learning and facilitate understanding of the material (Figure 7).

Cartoon images in comic books can be used to support teaching and learning activities through discussion activities, involving students actively in learning activities and motivating them. According to the questionnaire results, 38 respondents (95%) think that applying learning media using digital comic books could motivate students to learn Mandarin. Only two respondents (5%) think they are not motivated to learn by using digital comics. Learning through e-comic is considered to increase students' higher-order thinking skills. Figure 8 shows the percentage of the role of digital comic books in motivating students to learn Mandarin.
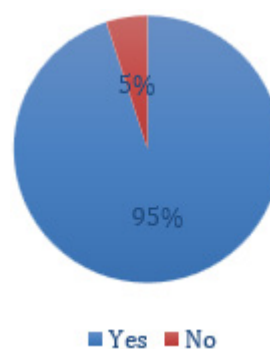

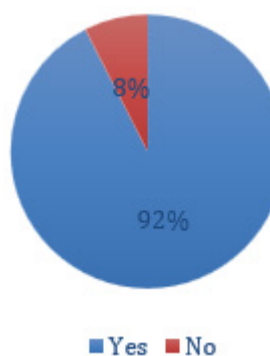Figure 8 The Role of Digital Comic Books in Motivating

Figure 9 Views of Students Learning Visually

Comic books are defined as a form of a cartoon that reveals characters and applies a story in a sequence that is closely related to the image and is designed to provide entertainment to the readers. The role of digital comic books in motivating can vary, especially in the context of learning. Comic book media in motivating learning, one of which is interesting visualization. From the questionnaire results, as many as 37 respondents (92.5%) think that applying learning media using digital comic books has an interesting visualization that can motivate students to learn Mandarin. Only three respondents (7.5%) think applying digital comic books is not interesting when learning Mandarin. It can be seen in Figure 9.

Comic books worldwide have four main drawing styles: cartoon style, semi-cartoon style, realism style, and fine art style. Seventeen respondents (45.5%) prefer the semi-cartoon comic style, which can be defined as semi-cartoon images such as the famous Japanese digital comics Sailormoon, Dragon Ball, or Naruto. Followed by 16 respondents who prefer cartoon-style comics, which can be defined as funny pictures that can take various forms. Only seven respondents (10%) prefer the realism style.

The role of digital comic books in motivating can vary, especially in the context of learning, one of which is that they can be used as intermediaries to facilitate material. From the questionnaire results, 40 respondents (100%) argue that applying learning media using digital comic books can be an intermediary to simplify material so that learning material is easier to understand and attracts students' interest (Figure 10).
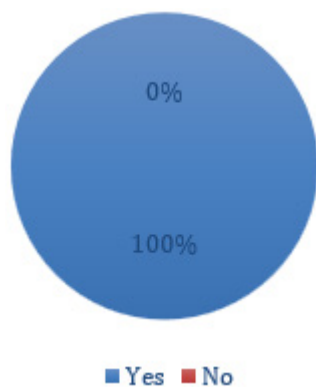

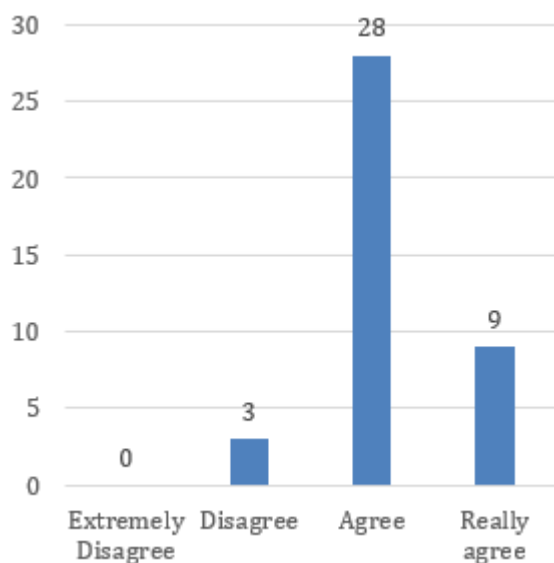Figure 10 The Role of Digital Comic Books in Facilitating Learning Materials

Figure 11 Interactive Learning with Digital Comic Books

The role of digital comic books in motivating can vary, especially in the context of learning.

Learning media has several benefits, one of which is making learning more interactive so that it can enable students to choose comic storylines, thereby increasing student motivation and involvement. The data from the questionnaire above shows that 37 respondents (92.50%) think that learning using digital comic book media is more interactive, and only three respondents (7.50%) disagree (Figure 11).

CONCLUSIONS

Based on the results of the questionnaire, it can be concluded that all respondents (40 people) agree that applying learning media using digital comic books can provide positive results in learning Mandarin. The results show that the highest percentage is that digital comic books make it easier for students to understand the material, namely 40 out of 40 respondents (100.00%). As for the interest in learning, respondents give the same opinion, with 39 respondents (97.5%) think that learning with comic book media is interesting. Even though the learning process using comic book media occurred online during the pandemic, (92%) of 37 respondents think that comic media can create interactive learning. Not only that, but (90%) of 36 students also think that this can improve the quality of learning, so it can be concluded that applying learning with comic books can increase the effectiveness of student learning.

In this case, it can be concluded that the frequency with which students apply digital comic book media in learning Mandarin conversation increases effectiveness during learning, which can be motivating. This shows that digital learning has been shown to influence student learning outcomes and usage of mobile learning, as well as the effectiveness of technology-enhanced approaches in teaching and learning Chinese as a foreign language for basic communication competency in listening and speaking. Future research suggests a grammar checker for dialogue that students have composed so that there is corrective feedback with mobile assistance centered on open correction, especially targeting the linguistic aspects of grammar and vocabulary, with content and vocabulary as the linguistic targets most often focused on to get better results.

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