# **TECHNOLOGY INFLUENCES COMICS FOR EDUCATION**

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#### **Abstract**

Non-fungible tokens (NFTs) are transferrable rights to digital assets, such as art, ingame items, collectibles, or music. The phenomenon and its markets have grown significantly since early 2021. This study aims to find the most popular NFT type. This study aims to describe how technology influences creating of NFT comics, and so it is used for education easily. This study uses a qualitative research method This study uses a qualitative research method focusing in developing NFT comics. Information are collected from journal articles and website. The research findings show that technology increases the NFT comic industry, especially for education. The main factor is contributing blockchain technology to creators and collectors. In addition, comics help students in reading and writing. They can now use mobile technologies to access the NFT comics and find, read and write learning.

Keywords: blockchain, comics, NFT, education

## I. Introduction

Comics are a form of storytelling. They use a series of static images while presenting a story as a tool. Unlike regular books, paintings, or movies, it would not be correct to characterize comics as better or worse than other genres; however, it should be admitted that they differ from different genres. [1]

This is especially true of books, which operate on long production schedules. By the time you write that novel about Facebook stalking, all the rules have changed, and readers will barely remember how they hated the announcement of a News Feed that would air all their business. Sure, some books do still rely upon technology as an integral part of the plot; but it's difficult to do so and still seem relevant even a year later, when the book comes out. Comics are blessedly different. You don't have to write and publish an entire novel all at once; instead, you release the story in installments, and technology mutates and evolves as your story does. Because of their serial

nature, comics are well-suited to take on timely issues like the role of social media and smart phones in our day-to-day interactions. [2].

#### 1.1 Phase of Comics Technology

During the comics phase, creators can create their work into editions that may only differ according to the genre.

## The Old Age of Comic Books

The Comic books have been a staple of American literature for more than a hundred years. But their history goes back further. The earliest known comic book, The Adventures of Obadiah Oldbuck, was published in Europe in 1837 in several different languages – none of which were English. Four years later, an English version was published in the U.K. The following year, that version was reprinted in New York, giving America its first comic book. The book was side stitched and contained 40 pages with six to 12 panels per page. Instead of using word balloons,

text was placed under the panels to describe the story. At the time, nobody had an inkling of what was to come. [3]

# The Modern Age of Comic Books

The Modern Age of Comic Books is a period in the history of American superhero comic books which began in 1985 and continues through the present day. [4] During approximately the first 15 years of this period, many comic book characters were redesigned, creators gained prominence in the industry, independent comics flourished, and larger publishing houses became more commercialized.

An alternative name for this period is the Dark Age of Comic Books, due to the popularity and artistic influence of titles with serious content, such as Batman: The Dark Knight Returns and Watchmen.

## Digital Comics

Digital comics, also known as electronic comics, eComics, e-comics, or ecomics, are comics released digitally, as opposed to in print. Digital comics commonly take the form of mobile comics and webcomics. [5] With the growing use of smartphones, tablets, and desktop screen reading, major publishers began releasing comics, graphic novels and manga in digital formats. Declining sales and copyright violation have led some publishers to find new ways to publish their comics, while others are just adapting to the digital age while still having great success with the printed comic format. [6]

#### **NFT Comics**

Non-Fungible Tokens are a particular type of smart contract. The Merriam-Webster Dictionary defines creating an NFT as the definition of NFT and then reselling it on one of the largest market-places. These revenues were donated to organizations involved in training and educating children and young people. NFTs are a new phenomenon, with pros and cons that this element entails: questions, potential, and many doubts. They will spread enough, be useful, or be, as many think, a bubble. All it is still to be discovered. However, if these doubts and curiosities are attractive at the level of scientific research, what can be interesting to study and can be helpful in marketing is

undoubtedly a first doubt. [7]

A lot has changed since then, with the most significant change coming at the turn of the 2020s, and the rise of blockchain technology and Web3 into mainstream prominence. Films and related franchises about comic book characters have saturated media, sometimes with unseemly, perilous consequences for storytelling. So, it's time to explore what role NFTs will play in the future of storytelling. Particularly in the context of comic books. [8]

#### 1.2 Educational Technology

Educational technology (commonly abbreviated as edutech, or edtech) is the combined use of computer hardware, software, and educational theory and practice to facilitate learning [9]. When referred to with its abbreviation, edtech, it often refers to the industry of companies that create educational technology.

In addition to the practical educational experience, educational technology is based on theoretical knowledge from various disciplines such as communication, education, psychology, sociology, artificial intelligence, and computer science. [10] It encompasses several domains including learning theory, computer-based training, online learning, and m-learning where mobile technologies are used.

The popularity of the Non-Fungible Token (NFT) has risen rapidly since 2020, becoming one of the most popular applications in the Fintech field. However, there has yet to be an attempt to perform a systematic review in this new area. This study aims to describe how technology influences creating of NFT comics, and so it is used for education easily.

#### II. RELATED WORK

Casale-Brunet et al. argue that the NFT phenomenon is a topic that became mainstream during 2021 and has continued to receive increasing attention from early 2022 to the present. This blockchain-based technology has also come to the forefront thanks to projects such as BAYCs whose images have been purchased by celebrities and traded at very high prices as reported by several media. In this paper, we analyzed the phenomenon of NFTs, focusing on the class related to PFPs. The centrality and in"uence of the

community related to o CryptoPunks in terms of volumes traded, social activity is higher and central to every other project in industries. [11]

#### III. Discussion

This study uses a qualitative research method [12], focusing in developing NFT comics.

#### 3.1 How NFT's work with comics

#### NFT's In Relation to Collectors

NFT's are basically the digital version of something comic collectors should actually be familiar with for years. When you buy a comic with a signature, there are two options, with and without a COA (Certificate of Authenticity). [13]

Without the Certificate, there is no way to officially know if it was the creator that signed it or not. It could be anyone with a gold sharpie. With the Certificate, someone reputable went through the process of verifying that this was actually the artist, writer, creator, or someone else that worked on the comic. They stood over them and watched them sign the comic and number the comic 1 out of 1,000.

Companies like CBCS or CGC both have credible teams that must witness the signing. Then they will issue a COA. I personally have several comics signed this way that I keep behind glass. This increases the value on average by 30% for newer comics but could go down if it is not authenticated. Plus, a comic signed by the creator can truly increase the sentimental value of the comic. There is just something cool and special about this.

Using blockchain technology (turning it into an NFT) basically does the exact same thing. When the creator turns it into an NFT, it is given a digital certificate that verifies that this is 1 of 1,000, just like the old COA's. The only real difference is that it is a digital version and did not have to go through the entire process of getting a physical certificate and authentication. That work was already done by the creator.

# NFT's In Relation to Creators

Now let's take a look at the NFTs and how they relate to Creators. It isn't hard to turn your comic into an NFT. All you have to do is upload, figure

out how many comics you want to be minted, and how much each comic should sell for.

Don't freak out when you hear minting. This basically means how many you want to be printed in the physical world. There is an input where you can type the number of how many you want to be minted. It's as easy as those age pickers on other sites. If you choose 0, then the book is not for sale. It becomes a "preview only" so people can only read the number of pages that you have specified in the preview section.

A lower amount of copies minted would help ensure the rarity of an issue. This, in my personal opinion, would help after you've made a name for yourself and want to sell to serious collectors. A higher amount of minted comics would keep the resale value low as well as the perspective rarity of your comic. This means it can help you get your name out there to potential buyers. You will have to play around and decide what's right for you.

Keep in mind that traditionally in print, a standard comic will have an average of 100,000 copies printed and shipped off to stores.

# Wrapping Up The NFT Talk For Now

For a collector, the NFT is just a new way of thinking about a Certificate of Authenticity. For a creator, turning it into an NFT is just as easy as uploading a pdf to any other site. We (by we, I mean our illustrious tech team) have gone above and beyond to make everything super freakin' easy for the end-user, no matter who you are.

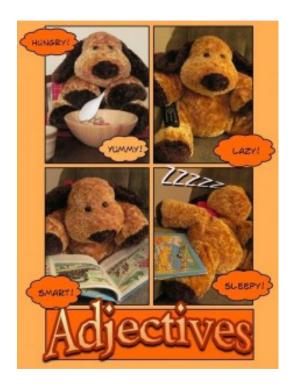
# **3.2** This The Benefits of Comics in Education

Comics are beneficial to learning in the class-room and not just a fun art-enrichment activity. [14][15]

#### Reading

Comics provide narrative experiences for students just beginning to read and for students acquiring a new language. Students follow story beginnings and endings, plot, characters, time and setting, sequencing without needing sophisticated word decoding skills. Images support the text and give students significant contextual

clues to word meaning. Comics act as a scaffold to student understanding. [15]



Adjectives by Warrensburg [15]

Comics motivate reluctant readers. They engage students in a literary format that is their own. Comics speak to students in a way they understand and identify with. Even after students learn to be strong readers, comics allow students to read material that combines images with text to express satire, symbolism, point of view, drama, puns and humor in ways not possible with text alone. [2]

#### Writing

Many students read fluently but need help to write. They complain that they don't know what to write. They have ideas, but they lack the written language skills to create a beginning, follow a sequence of ideas and then draw their writing to a logical conclusion.

Students frequently ask if they may draw a picture when they're writing. They are reaching for images to support their language ideas. Allowed to use words and pictures, they will resolve problems of storytelling that they would not otherwise experience using words alone. Like reading, comics provide scaffolding so that students experience success in their writing. Students transfer specific elements directly into text-only writing.

For example, students learn that whatever text is found in a word balloon is put inside quotes in their text-only writing.

Using Comic Life, students have a new publishing medium. Comic Life documents can be printed, emailed to parents, or posted on a website.

Key benefits of using comics in education

- A great visual Representation of Knowledge
- Presents what is essential
- Easier to remember a visual graphic containing key information
- Engaging through thinking, creating and writing.
- Perfect avenue for writing dialogue
- Incites students with low interest in writing
- Helps organization through storytelling and storyboarding
- Using visual images convey meaning to a story or topic
- Develops creative and higher level thought processes
- Develops composition techniques through visual-verbal connections
- Enriches reading, writing, and thinking
- Serves as and assessment and evaluation tool
- Sequencing promotes understanding

#### IV. Conclusion

This study examines how technology influences the creation of NFT comics. The research findings show that technology increases the NFT comic industry, especially for education. The main factor is contributing blockchain technology to creators and collectors. In addition, comics help students in reading and writing. They can now use mobile technologies to access the NFT comics and find, read and write learning.

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