

Qualitative Content Analysis of Education Digital Literacy in Nitijana Game

Syarifah Nur Aini

Department Communication, Faculty of Social and Political Science, Universitas Negeri Yogyakarta, Indonesia
Email: syarifah.aini@uny.ac.id

ABSTRACT

The massive spread of narratives tied to emotional constructs such as threats and hatred has brought about destructive impacts on society. There is a growing need to enhance knowledge and skills in media engagement, particularly in responding to circulating information. Digital literacy has become a crucial aspect that must be improved by the information society. Through an education-entertainment approach, Nitijana emerges as a medium for digital literacy education in the form of a game. This study examines the digital literacy elements presented in the Nitijana game through qualitative content analysis. The analysis draws on Japelidi's components of digital literacy, Schell's game development framework, and the concept of cyberspace to dissect this phenomenon. Users are able to play the game while simultaneously learning and practicing various aspects of digital literacy, such as fact-checking hoaxes and verifying information. The findings of this research reveal several aspects of digital literacy, including access, selection, comprehension, analysis, verification, evaluation, participation, and distribution. Meanwhile, the fundamental elements found in the Nitijana game include its mechanics, storyline, and aesthetics. It is hoped that this article will contribute to the field of communication science, particularly in the areas of entertainment media and digital literacy.

Keywords: *Digital literacy, education-entertainment, Nitijana*

INTRODUCTION

The rapid development of communication technology has made it increasingly easy to disseminate information to the public. In fact, Indonesian society is currently in an era where information technology has become a very close and inseparable aspect of everyday life (Ahmad, 2013). However, the information constantly circulating through the media is not always informative and can create various problems. Unsurprisingly, the rapidly circulating information is often misused as a means of spreading hoaxes among the public, potentially leading to national disintegration. Yuliani (2017) stated that Ministry of Communication and Information data shows that there are approximately 800,000 websites in Indonesia that show signs of spreading false information. This condition confirms that media use is exploited by certain individuals for personal orientation and has non-progressive consequences. The information produced and distributed is not intended to capture what is dreamed of. Instead, various narratives are created to construct social emotions in the form of incitement, threats, and even hatred.

Between August 2018 and May 2023, the AIS Team of the Directorate General of Informatics Applications at the Ministry of Communication and Information Technology (Husna, 2023) identified 11,642 hoaxes (Husna, 2023). Of these, 2,287 were health-related hoaxes, 2,111 government-related, 1,938 fraud-related, and 1,373 political-related. Disinformation and misinformation increased significantly between January and May 2023 compared to the same period in 2022. The proliferation of hoaxes on digital platforms is significant and tends to be detrimental. One essential impact is the disruption of public trust in the information they receive. This creates uncertainty and confusion, making it difficult for people to distinguish between facts and manipulation of

information (Rahmawati et al., 2023). This, in line with Majid (2019), can lead to conflict among groups with differing views.

Gen Z, as part of society, acts as an agent of change, bringing about positive change alongside the dynamics of information, particularly through cyberspace. Research by Hilya et al. (in Faturrahman, 2022) shows that Gen Z, who are considered accustomed to communicating through media, are actually vulnerable to hoaxes. This is due to their relatively weak digital literacy. Furthermore, this vulnerability is exacerbated by a lack of understanding of digital ethics as a foundation for behavior in the digital space. Gen Z in Indonesia has the ability to identify credible sources of information. However, the majority of them still face challenges in investigating hoax news spread on social media (Arini et al., 2022). Gen Z prefers to read article titles and news, whether they are genuine or fake. This is compounded by their reluctance to read and interpret articles thoroughly.

To minimize and suppress exposure to hoaxes among Gen Z, the role and contribution of digital literacy is needed. Digital literacy has had a positive impact on knowledge, understanding, and skills in using social media which is currently a source of information for the community, especially the younger generation (Silvana & Darmawan, 2018). If we look at the thoughts of Rianto (2016), with digital literacy it is hoped that people will not only use their critical reasoning in accessing information or not depend on one source of information. If interpreted further, digital literacy also aims to prevent information issues such as cyber bullying, hate speech, and cybercrime from becoming increasingly rampant in the online world. Digital literacy is crucial for Gen Z to always have with the goals according to Faizalluqyana (2022), namely (a) to form an innovative and creative digital generation, (b) to form human resources with character, (c) to present a Gen Z who is wiser in using technology.

Digital literacy, as knowledge and skills essential for using social media, must also be accompanied by an attractive approach. With advances in technology, ideas, and creative abilities, digital literacy cannot be achieved through conventional means. One form of digital literacy currently gaining popularity in the educational and entertainment sectors is interactive games. Educational games present content specifically designed to capture the attention of users, especially Gen Z. Learning about digital literacy will be effective when supported by educational media in the form of website-based games (Susilawati et al., 2024). According to Sri & Alfiyan (2023), gamification in educational activities is not a new concept and has received widespread attention in recent years. Gamification is gaining strength as traditional approaches to educational activities become saturated and less engaging.

Games, particularly video games, can be used to support various human needs through their ability as a medium for the learning process (Wirawanda & Setyawan, 2018). The presence of creative content and attractive gameplay enables users to hone their capabilities. The use of games as a medium is emphasized not only for children and adolescents, but adults also become part of the user atmosphere. Ge (2018) confirms that games are increasingly growing in relevance and appeal as a source of learning in line with the growth of smartphones and interactive technology. Moreover, the real world is beginning to incorporate components of games and games themselves into modified activities (Arnold, 2014). Just as the process of adaptation through games is intertwined with skill development, audience engagement, and encouraging attitudinal change. Although in reality, education about digital literacy through games has not been able to reach all levels of society, this effort is a pioneer in advancing the quality of the nation's generation.

In a speech delivered by Widodo (in Halim, 2021), challenges in the digital space are growing, with negative content and digital crime proliferating. In line with this, a new innovation in a website-based game called Nitijana was created, embracing the theme "Counter Hoaxes with Fact Checking." This work, which utilizes technological developments, aims to help improve digital literacy, especially for Gen Z and other users, regarding hoaxes and fact-checking. Through the Nitijana game, a concise explanation of hoaxes was created, an application that can be accessed for private fact-checking searches, and a game containing case studies of Covid-19 hoaxes that have circulated in the media space and how to overcome them (Halim, 2021). An interesting aspect that adds value to Nitijana is the construction of the character Rajit, who is brave and does not easily believe information. Where the storyline of Rajit's character is also framed as realistically as possible and supported by relevant case studies. The education program Nitijana has become a magnetic phenomenon, also based on the turmoil in the country during the COVID-19 pandemic. In this context, this research begins by examining how digital literacy competencies are presented through the Nitijana game.

Research on digital literacy in Indonesia has been extensively conducted in social sciences, particularly in communication studies related to information technology and education. Numerous findings discuss the

application of digital literacy as a means to prevent the spread of disinformation in social spaces. Unsurprisingly, how digital literacy education is implemented through the use of technology such as games in Indonesia has also

received attention. However, existing research has failed to address the digital literacy created in the Nitijana game. Therefore, this study attempts to fill this gap. By exploring digital literacy on the Nitijana game website, this research is expected to contribute to the conceptual development of digital literacy education trends that utilize technological advances. Furthermore, this research can contribute to supporting the work of Indonesian children who expand the arena of creativity and critical thinking.

LITERATURE REVIEW

Digital Literacy

Ability digital literacy becomes A underlying aspects interaction technology in a way effective in all situation learning (Kenton & Blummer, 2010). Where digital literacy leads to capability individual in find, assess, until narrate information in various digital platforms. In the era of disruption digital literacy is very much needed For reduce and prevent exposure from information that is not credible. According to Syah & Darmawan (2019), ability strengthened digital literacy with use of social media capable spur changes in attitudes, actions, to cognition to more space positive. Although in journey and efforts, digital literacy is still often meet constraint related with connectivity users until ability For utilizing technological media with maximum. That digital literacy is not can released from a number of factor like use of online media, values academic, role family, until intensity reading (Kuo, 2016; McDougall, et al., 2018).

There is ten competence digital literacy by Japelidi (Kurnia & Wijayanto, 2020) which can made into reject measuring including (a) access, competence For operate digital media optimally through technique recognize and control on various features presented; (b) selection, competence For selecting and sorting to information originating from from diverse source so that in harmony with what is needed; (c) understanding, competence interpret optimally the information that has been obtained Good from text implied or written; (d) analysis, competence For do analysis information with investigate the message conveyed in understand meaning of the message; (e) verification, competence For confirm cross with information of a nature similar from a number of other sources for validate truth information; (f) evaluation, competence consider risks that can happen before he did distribution information, also considering step or the medium to be used; (g) distribution, competence to spread information with notice party accessor information (h) production, competence to present accurate information with notice ethics and rules law; (i) participation, competence in play a role active in a way critical to share information; (j) collaboration, competence to take the initiative and distribute information in a way honest, accurate, ethical and work The same with party other.

Game

In a way general games interpreted as artifacts systematic moment investigated with relation to studies regarding digital games. In *The Art of Computer Game Design* (1983) by Crawford (Stenros, 2015), there are identification four factor common in games in the form of representation, interaction, conflict, to security. Where is the game as A closed formal system nature subjective representation existence reality certain. Besides that, the existing players in it is also of a nature abstract and games interpreted as system with bound to a game rules as an effective teaching medium with offer field For explored and free risk on problem intellectual and very meaningful social (Abt, 1970). Tavinor (2009) defines games through kelindan Objective rules and gameplay with assumption Strange according to him. Meanwhile the interesting thing there is that games no must containing gameplay, but can load fiction interactive (Stenros, 2016).

Study This will study about online games as games that can operated in a way online in media room using internet network. Borrowing thinking from Schell (2008), there are four element the basis that forms a game. First, the mechanism is the rules presented in game where loading goals, steps player capable or no for reach goals, until the consequences that will occur happen when player try to each out its orientation. While mechanism consists of on six category in the form of the world, objects and attributes, actions, rules and limitations, capabilities or skill, opportunity. Second, story as order on the event that represents something game. When games certain have the story that is about to delivered, then mechanisms are also required in accordance to support story and launch story so that progress. Third, aesthetics related How determine something games capable seen until felt. That aesthetics become crucial aspects of design in games caused by intertwined with

experience by players. Fourth, the technology in which the technology is selected to create a games give impact that games capable load things attractive certain and its limitations. Besides that, through technology, the underlying media formation games were created and space how story capable circulated.

Education and Entertainment

Entertainment-education by Singhal & Rogers (in Patel, 2002) is an internal process designing and implement media messages with intentionally with purpose to entertain and teach. Where things the intertwined to increase knowledge audience, forming attitude, until change action. Entertainment-education become a strategy in present change on behavior in room socially capable produce changes. In implementation entertainment-education potential to existence material abundant education. So that according to Piotrow & De Fossard (in Kawooya , 2013) entertainment-education possible no interesting generation young and lots content entertainment that is not create message essential in the educational process. In harmony with problematic said, then required balance for form crucial and providing messages impact build for audience. Various genres in entertainment media has identified and have relevance for the delivery process messages in development education to the community.

There are nine characteristics suitable entertainment in distribution pro-social messages to teach education until advance ideals development (Piotrow , 1994) in the form of perennial, pervasive, popular, personal, pleasurable, persuasive, passionate, profitable, and practical. Stephenson (in Brown & Singhal, 1999) shows that entertainment nature fun, even game capable create release or escape. So the entertainment program is interesting can inspiring emotion strong audience about a issue and problematic certain. Entertainment represent action practical in convey message related education so that audience in large amount capable reachable with effective (Brown & Singhal, 1999). Social media play a role in entertainment-education because ownership potential participatory and able become solution in approach participatory to education inclusive (Dutta, 2006).
Cyberculture

Bell (2001) interprets cyberculture has the same meaning with cyberspace that cyberspace always is cyberculture due to context a culture that is always present in it. On the other hand, cyberculture can defined through term device hard like network global computer network through infrastructure communication and facilitating interaction in public distance far away. Cyberculture is also interpreted with based on metaphor symbolic that interprets cyberculture as room imaginary between technology that man capable build self to the new world. Although Cavallaro (2000) views cyberspace as the environment in which it is located full will technology electronics, but technology need to read as a culture. That what Edwards (1996) said, in cyberculture society given room For looking at ideas, experiences, to metaphor on the interaction with technology. Cyberculture become other alternatives in mentioning the virtual world where emphasizing to interaction and existence relation two direction.

Cyberculture is braid from material and symbolic stories (Bell, 2001). Material stories to see how formation cyberculture does not let go from the technological process communication until convergence. Components materialist in dynamics development technology and the internet become receptacle how culture capable formed and mutually closely related. Symbolic stories present chance on public to interpret with free on cyberspace through role the symbols presented in room said. Can understood related the stories told intertwined with the representation process in culture popular. So that the production process, circulation, to consumption impact to method public catch meaning in cyberspace. Material and symbolic stories are always side by side with economy politics in cyberculture.

METHODS

This study uses paradigm interpretive and with approach qualitative. Paradigm interpretive evaluate reality social is something that is holistic, mutual related, complex, very meaningful, and reciprocal relationships (Rahardjo, 2018). Meanwhile, study qualitative is methods to explore and understand perceived meaning originate from problem social or humanity (Creswell, 2016). Author used technique analysis content qualitative to look for until classify data findings. In the process of processing until presenting data, author use technique from Miles & Huberman (1992) namely data reduction, data presentation, data extraction conclusion and verification. The data that has been found Then analyzed with framework competence Japelidi digital literacy, games according to Schell, the concept entertainment-education, up to cyberculture. In testing validity of data in study This so used technique triangulation where according to Patton (in Moleong, 2005) as effort compare

and check degrees trust on information that has been obtained through time and different tools. While technique triangulation used in study is triangulation theory. The following category elements analyzed in this article:

No	Category	Screenshot		
1	Opening section: Rajit's introduction and story			
2	Additional section: hoaxes and checks fact			
3	Main part: game digital literacy			




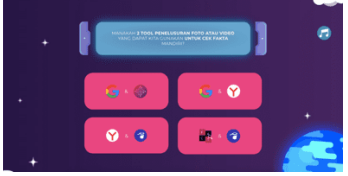


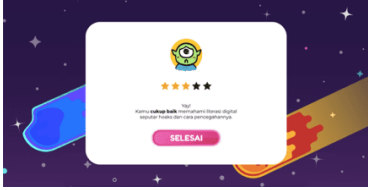
		 
		 
		  

Table 1. Categories elements analyzed
(Source: Processed researcher data)

RESULTS AND DISCUSSION

Opening Section: Introduction and Rajit's Story

Before entering the core or game space, Nitijana presents an introductory section and contextual examples related to the problem of hoaxes. The digital era serves as a reference point for the space and time associated with Nitijana's topic. Through this introductory space, Nitijana defines it in terms of conditions in the digital era, which facilitates the rapid access and distribution of information through social media. This interpretation is structured with reference to how the audience can interpret the context of the digital era, which is intertwined with the deluge of news and its associated noise.

The presence of Nitijana is a new aspect of cyberculture , capable of creating a new culture within cyberspace. People also have the opportunity to produce and create all kinds of ideas and activities with technology through Nitijana games. As Edwards (1996) points out, cyberculture provides a space for people to explore ideas, experiences, and metaphors regarding interactions with technology. Nitijana intertwines material and symbolic stories. Material stories intertwine with smartphones, personal computers, and other devices used as media for playing Nitijana. Symbolic stories, on the other hand, demonstrate the diverse symbolic roles played in Nitijana games.



Figure 1. Introduction page
Source: Nitijana Website

Nitijana constructs one character in introducing this game: Rajit. Rajit is positioned as a Gen Z and is part of the 175.5 million internet users in Indonesia. The narrative presented for Rajit is a habit that is claimed to be typical of Gen Z in general, namely chatting, gaming, and music streaming for 4 to 8 hours a day. Based on this depiction, Rajit is described as an individual who receives messages from family chat groups. As a Gen Z, Rajit also likes to respond to information he receives through social media spaces. Intertwined with the conditions during Covid-19, Nitijana brings this context into Rajit's story. Rajit is active in disseminating information he obtains regarding viral events regarding claims of Covid-19 and the Covid-19 vaccine.

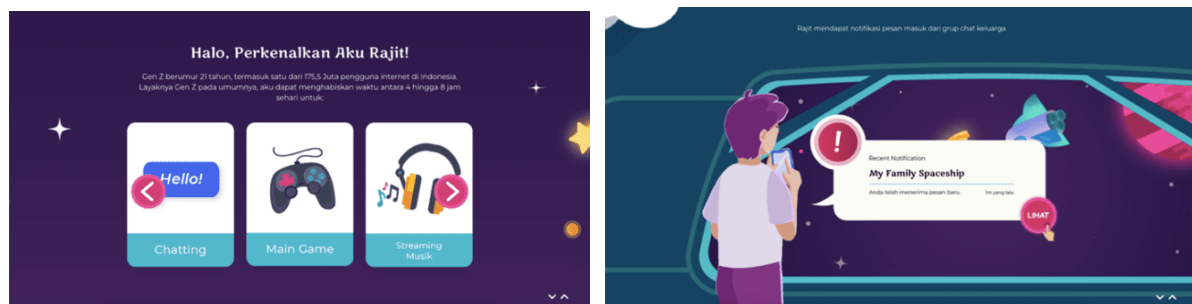


Figure 2. Introduction of the character Rajit
(Source: Nitijana Website)



Figure 3. Rajit and information obtained
(Source: Nitijana Website)

The text and visualizations presented in this introductory section serve as a bridge for the audience to interpret and determine their next choices. Nitijana offers the audience options related to Rajit's activities, and what steps they would take if they were in that situation. Two options are presented: believing the information and sharing it or attempting to verify the information first. On this page, each option will lead to other pages containing relevant information. The "trust it and share it" option contains information regarding negative risks and related legal regulations. Meanwhile, the "try to verify the information first" option contains information about the recommended verification process that can be carried out to check and be wary of news or content

received. This section also presents the mechanics and story aspects as two essential elements in creating a game (Schell, 2008).

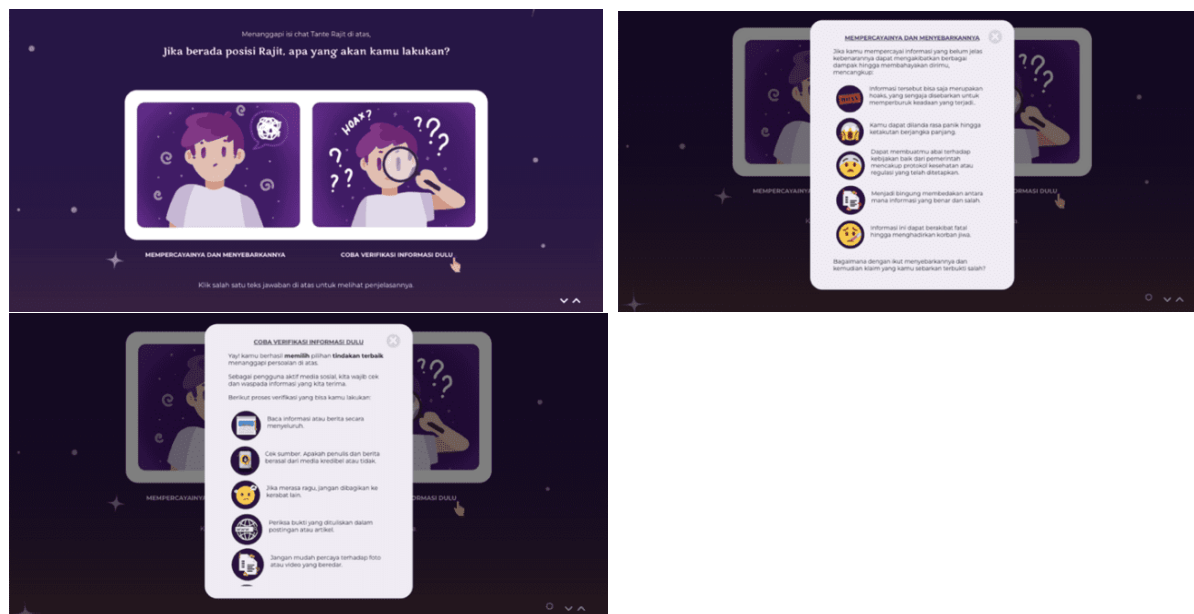


Figure 4. Response to Rajit
(Source: Nitijana Website)

Additional Section: Hoaxes and Fake Checks

Nitijana also features a page designed to help audiences deepen their digital literacy skills, specifically regarding hoaxes and fact-checking. This page features Rajit, who wants to avoid being swayed by information whose veracity is uncertain. This section serves as a continuation of the audience's journey to gain in-depth information, beyond the introduction and the main game. There are two sections for audiences to learn and interpret: a hoax encyclopedia and independent fact-checking.

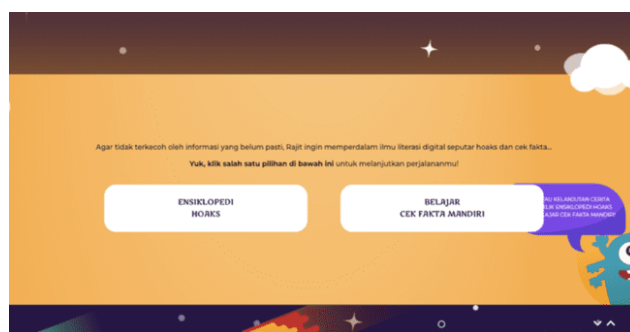


Figure 5. Additional pages related to digital literacy
(Source: Nitijana Website)

First, the "hoax encyclopedia" page contains the definition of hoaxes, their history, an introduction to misinformation, disinformation, and malinformation, as well as the types of hoaxes and disinformation. Visualizations of the types of hoaxes and disinformation are also presented to emphasize the explanation, with different colors indicating differences in quantity. When sorted, the most common hoaxes and disinformation are satire or parody, misleading content, false content, false connections, false content, manipulated content, and imitation content. The information in the hoax encyclopedia also comes from credible sources such as Mafindo and UNESCO. This section is able to improve digital literacy competencies according to Japelidi (Kurnia & Wijayanto, 2020), in the form of selection skills, analytical understanding, and evaluation.



Figure 6. Hoax encyclopedia page
Source: Nitijana Website

Second, the "learn to independently fact-check" page provides an orientation so that the audience can check when they encounter information whose veracity is uncertain. This page serves as an introduction to the core of the game. The "learn to independently fact-check" feature differs from the "hoax encyclopedia," which contains a variety of information. Therefore, there is no explanatory material regarding independent fact-checking; instead, the audience is guided through the game and enters the core arena of the Nitijana game. The hope is that users can understand their digital literacy skills through the various questions presented in the main menu. Through the "learn to independently fact-check" section, users can improve their capabilities in selecting, verifying, and evaluating information according to the digital literacy competencies of Japelidi (Kurnia & Wijayanto, 2020).



Figure 7. Independent fact-checking learning page
(Source: Nitijana Website)

Main Section: Games Digital Literacy

On the page main menu start games Nitijana, presented introduction and objectives Why audience need to try and play here. Audience positioned as active individuals using social media so that required existence sufficient knowledge related digital literacy in the form of hoax and check fact independent. For to strengthen it, presented speech from Joko Widodo in 2021 regarding invitation to increase digital skills through digital literacy. This elaborated with massive challenges in the digital space in the form of rolling content negative and evil online. Ability literacy digital as something underlying aspects interaction technology with effective in every situation learning (Kenton & Blummer, 2010). Before entering the core arena of the game, rules are also presented that can be guide and provide information related What should done by the audience. Users expected capable search and decide for appropriate answer, ensuring all question has answered, until get key answer and the discussion.

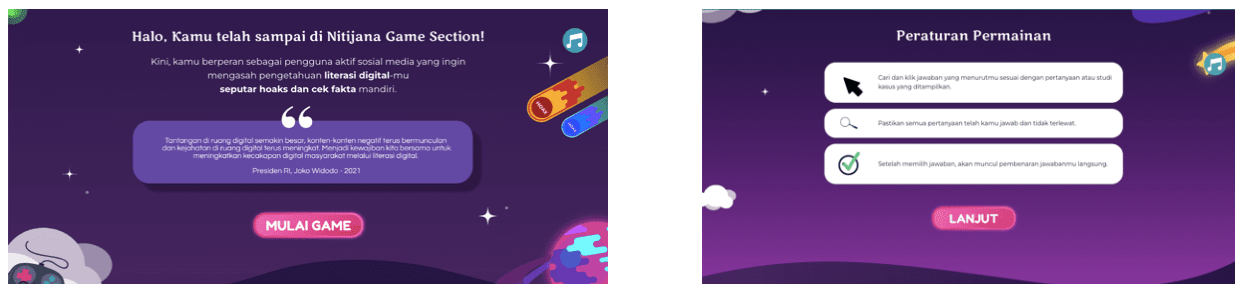


Figure 8. Opening page of the game main
(Source: Nitijana Website)

In the core of the game Nitijana, there is seven questions that must be asked completed by the audience where it contains topic related digital literacy in the form of hoax and check fact independent. Where the ability supported digital literacy with use of media can also spur change attitudes, actions, and cognition to in more space positive (Syah & Darmawan, 2019). There are questions that must be answered completed in the form of criteria information that can called as hoaxes, types content that presents impact negative, tools used For check fact independent, search check fact through claim hoax, identification claim hoax, steps and sequence for tracing check facts. In Nitijana there is a number of competence digital literacy initiated by Japelidi (Kurnia & Wijayanto, 2020) in the form of selection, understanding, analysis, verification, evaluation, distribution, until participate. After audience choose answers to each question so will appear results Correct or wrong with accompanied by the explanation. If audience has finish questions in the core of the game Nitijana, next will appear scores and levels digital literacy possessed in accordance with ability answer the questions.



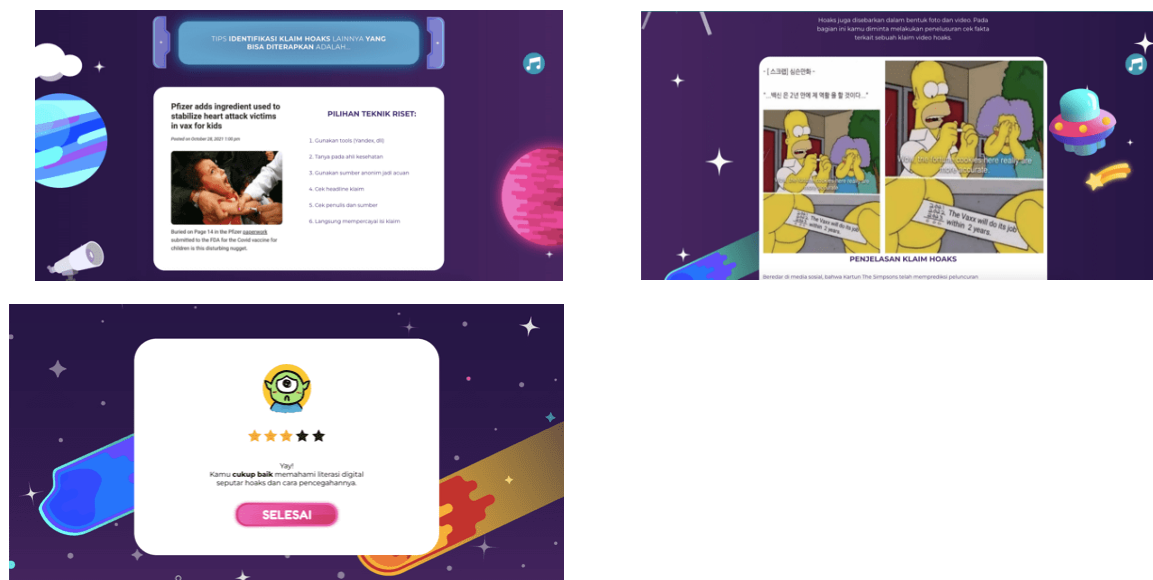


Figure 9. The core page of the game main
(Source: Nitijana Website)

Games presented in games This with load knowledge and ability digital literacy shows contribution implementation draft entertainment-education. In line with Singhal & Rogers (in Patel, 2002) that there is a process in design and implement intentional media messages to entertain and teaching. The process seen in relation users to increase knowledge related digital literacy, shaping a wise attitude, so that change action respond to and spread information optimally. However, appropriate with Piotrow & De Fossard (in Kawooya, 2013), entertainment-education own threat related lack of attention on generation young so that not enough maximum in present essential meaning. So, it is necessary existence production message for effort progressive as created in Nitijana. Education about digital literacy packaged with illustrations and games to give nuances significant entertainment. Saturation and monotonous nuances can overcome with presented room education wrapped in creativity on visualization. This is intertwined with one of them element the basis that forms A games in the form of aesthetics to determine atmosphere meaningful and formative experience certain (Schell, 2008).

CONCLUSION

This research presents a novelty by exploring the Nitijana game, which aims to provide digital literacy education to the public. Through cyberspace, entertainment-based education is constantly being rolled out through the creation of the Nitijana game. This is intertwined with Gen Z as the primary target user of digital literacy education through the Nitijana game. The problem of digital literacy, which is a crucial issue in the information society, is addressed with educational solutions that utilize creative narratives and visualizations. The Nitijana game contains several basic elements, including mechanisms, stories, and aesthetics. In addition, the digital literacy aspect as the main content also encompasses several components: access, selection, understanding, analysis, verification, evaluation, participation, and distribution. This research still has limitations in the study through content analysis of several features in the Nitijana game. Therefore, further study is needed to examine the impact and influence through a broader corpus.

REFERENCES

- Abt, C. C. (1970). *Serious games*. New York, NY: The Viking Press.
- Ahmad, A. (2013). Perkembangan Media Online dan Fenomena Disinformasi (Analisis pada Sejumlah Situs Islam). *Jurnal Pekommas*, 16(3), 177-186. <https://doi.org/10.30818/jpkm.2013.1160305>.

- Arini, H. M., Lathifah, N., & Wijayanto, T. (September, 2022). Digital ‘native’ atau ‘naïve’? Generasi Z di Indonesia cenderung percaya info dari pemerintah, tapi kesulitan mendeteksi hoaks. *The Conversation*. <https://theconversation.com/digital-native-atau-naive-generasi-z-di-indonesia-cenderung-percaya-info-dari-pemerintah-tapi-kesulitan-mendeteksi-hoaks-190062>.
- Arnold, B. J. (2014). Gamification in education. *Proceedings of the American Society of Business and Behavioral Sciences*, 21(1), 32–39.
- Creswell, J. W. (2016). *Research Design: Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Yogyakarta: Pustaka Pelajar.
- Dutta, M. J. (2006). Theoretical Approaches to Entertainment Education Campaigns: A Subaltern Critique.” *Health Communication* 20 (3): 221–31. https://doi.org/10.1207/s15327027hc2003_2.
- Faizalluqyana, N. (Mei, 2022). Generasi Z Berperan Penting dalam Menerapkan Literasi Digital. *Kumparan*. <https://kumparan.com/nilna-faizalluqyana/generasi-z-berperan-penting-dalam-menerapkan-literasi-digital-1y1IN3igPnL/4>.
- Faturrahman, H. (Juli, 2022). Rentan Hoaks Generasi Digital. *Tempo*. <https://koran.tempo.co/read/pendidikan/476387/digital-native-atau-naive-generasi-z-di-indonesia-cenderung-percaya-info-dari-pemerintah-tapi-kesulitan-mendeteksi-hoaks>.
- Ge, Z. G. (2018). The impact of forfeit-or-prize gamified teaching on e-learners’ learning performance. *Computers & Education*, 126, 143–152. <https://doi.org/10.1016/j.compedu.2018.07.009>.
- Halim. (Desember, 2021). Asah Kemampuan Literasi Digital Lewat News Game Nitijana. *Liputan6*. <https://www.liputan6.com/cek-fakta/read/4834446/asah-kemampuan-literasi-digital-lewat-news-game-nitijana>.
- Husna, H. T. (2023). Sampai Mei 2023, Kominfo Identifikasi 11.642 Konten Hoaks. Aptika Kominfo. <https://aptika.kominfo.go.id/2023/06/sampai-mei-2023-kominfo-identifikasi-11-642-konten-hoaks/>.
- Kawooya, T. (2013). One Sound Bite at a Time: Examining the Discourse of the Representation of People Living with HIV/AIDS on an Entertainment-Education Drama RockPoint 256. [Tesis Master di Universitas Ottawa]. Ann Arbor, MI: ProQuest.
- Kenton, J., & Blummer, B. (2010). Promoting digital literacy skills: Examples from the literature and implications for academic librarians. *Community and Junior College Libraries*. <https://doi.org/10.1080/02763911003688737>.
- Kurnia, N., & Wijayanto, X.A. (2020). Kolaborasi sebagai kunci: Membumikan kompetensi literasi digital Japelidi. Dalam N. Kurnia, L. Nurhajati, & S.I. Astuti (Eds.), *Kolaborasi lawan (Hoaks) COVID-19: Kampanye, riset dan pengalaman Japelidi di tengah pandemi* (hal. 1-34). Program Studi Magister Ilmu Komunikasi, Departemen Ilmu Komunikasi, Universitas Gadjah Mada.
- Kuo, N.-C. (2016). Promoting Family Literacy through the Five Pillars of Family and Community Engagement (FACE). *School Community Journal*.
- Majid, A. (2019). Fenomena Penyebaran Hoaks dan Literasi Bermedia. *Jurnal Komodifikasi*, 8, 228–241. <http://journal.uin-alauddin.ac.id/index.php/Komodifikasi/article/view/11329/7296>.
- McDougall, J., Readman, M., & Wilkinson, P. (2018). The uses of (digital) literacy. *Learning, Media and Technology*. <https://doi.org/10.1080/17439884.2018.1462206>.
- Moleong, L. J. (2010). *Metodologi Penelitian Kualitatif*. Bandung: PT Remaja Rosdakarya
- Patel, D.S.(2002). Changing Health Knowledge, Attitudes, and Behavioral Intentions: An Analysis of How Much Educational Content should be Inserted into an Entertainment-Education Program. [Disertasi Doktorat di Michigan State University]. Ann Arbor, MI: ProQuest.
- Piotrow, P. T. (1994). "Entertainment-education": An idea whose time has come. *Population Today* (March): 4-5. <https://pubmed.ncbi.nlm.nih.gov/12318953/>
- Rahardjo, M. (2018). Paradigma interpretif. <http://repository.uin-malang.ac.id/2437/1/2437.pdf>.

- Rahmawati, D., Robawa, R. S. P., Al Abiyyi, M. F., RF, P. D. N., Nugraha, R. I., Margono, F. P., ... & Sholihatin, E. (2023). Analisis Hoaks dalam Konteks Digital: Implikasi dan Pencegahannya di Indonesia. *Innovative: Journal Of Social Science Research*, 3(2), 10819-10829. <http://j-innovative.org/index.php/Innovative/article/view/1420>.
- Sari, D. N., & Alfiyan, A. R. (2023). Peran Adaptasi Game (Gamifikasi) dalam Pembelajaran untuk Meningkatkan Literasi Digital: Systematic Literature Review. *UPGRADE: Jurnal Pendidikan Teknologi Informasi*, 1(1), 43-52. <https://doi.org/10.30812/upgrade.v1i1.3157>.
- Stenros, J. (2015). Playfulness, play, and games: A constructionist ludology approach. [Doctoral dissertation, University of Tampere, Tampere, Finland].
- Susilawati, D., Iswara, P. D., & Aeni, A. N. (2024). Development of Digital Literacy Educational Game for Elementary School Students to Be Wise in Using the Internet. *Journal of Education Research*, 5(1), 525-536. <https://doi.org/10.37985/jer.v5i1.896>.
- Syah, R., & Darmawan, D. (2019). Pemanfaatan Media Sosial Instagram sebagai Literasi Visual pada Pendidikan Orang Dewasa. In Akrab (Vol. 10). <https://garuda.kemdikbud.go.id/documents/detail/1861110>.
- Tavinor, G. (2009). *The art of videogames*. Chichester, England: Wiley-Blackwell.
- Wiranda, Y., & Setyawan, S. (2018). *Literasi Game Untuk Remaja dan Dewasa*. Jawa Tengah: Percetakan Lembayung.
- Yuliani, A. (Desember, 2017). Ada 800.000 Situs Penyebar Hoax di Indonesia. *Kominfo*. https://www.kominfo.go.id/content/detail/12008/ada-800000-situs-penyebar-hoax-di-indonesia/0/sorotan_media.