Creative Innovation for Better Indonesia, Designing Pancasila Snakes and Ladders Game

Kurnia Setiawan^{1*}, Ninawati², and Meiske Yunithree³

¹Visual Communication Design Study Program, Faculty of Art and Design, Universitas Tarumanagara, Jl. S Parman. No.1, Jakarta Barat 11410, Indonesia

² Psychology Study Program, Faculty of Psychology, Universitas Tarumanagara, Jl. S Parman. No.1, Jakarta Barat 11410, Indonesia

³ Psychology Study Program, Faculty of Psychology, Universitas Tarumanagara, Jl. S Parman. No.1, Jakarta Barat 11410, Indonesia

kurnias@fsrd.untar.ac.id

Abstract. Snakes and ladders game was originally made from India by the name Moksha Patam/ Gyan Chauper (game of wisdom). The ladders represented virtues and the snakes represented evil. The ideals of the game inspired a version introduced in Victorian England, interpreted and used as a tool for teaching the effects of good deeds versus bad. At the present moment, snakes and ladders game is used for teaching young children about various subjects in English, America, Indonesia, etc. The researcher has an idea to design Pancasila Snakes and Ladders Game to be used as a learning media for students to learn about Pancasila. This research is an embodiment of visual communication design. It is a multidisciplinary study, combining the fields of design and educational psychology. The research methods used design thinking process; empathy – define – ideate – prototype – test. The output of the research was prototype Pancasila Snakes and Ladders Game. The prototype has been developed and tested in several school and got positive responses.

Keywords : Snakes and ladders game, design thinking, Pancasila

1. Introduction

The Pancasila as a state ideology can be said to be an "integralistic" ideology that overcomes individual and group-understanding particularity (Latif, 2015, 36-37). After the speech of the Pancasila on the 1st of June, then formed a small committee numbering nine people who gave birth to the manuscript of the Diakarta Charter behind the Godhead there are seven words that read "with obligations To live the sharia of Islam for its adherents". The removal of the seven Words is the initiative of Mohammad Hatta (for the sake of preserving the nation's integrity). Azyumardi Azra in scientific oration once said, "from the process of acceptance of Pancasila, clearly seen that the Islamic leaders at that time were more concerned with harmony and national integration than the interests of Islam or mere Muslims." (Basarah, 2017, 13 14). At this time Pancasila gained a challenge. Indonesia's post-election in Jakarta and the presidential election showed strong identity politics. Religious and ethnic issues became political commodities. Based on the Indonesia's Centre for Religious and Cross Culture Studies (CRCS) Report as a democracy with the majority of the population holding a religious identity, the contestation to encourage religious roles in public spaces is inevitable. The ability of the community and the country to manage diversity varies from one place to another (some are able to live side-by-hand/coexistence and vice versa), not a few pillars in one society is damaged by external factors, including conflicting information coming from elsewhere. The capacity of communities and countries in managing diversity is often weakened by the lack of synergy between elements. The differences in perspective, approach, and misunderstanding often create a blaming situation between actors who should cooperate in creating harmony. Responses to religious issues are often based on opinions, suspicions, or misunderstandings (Ahnaf, 2015, 1).

According to Yudi Latif, chairman of the President Working Unit of Pancasila Ideology Development (UKP Pancasila, 2017 then transformed into the Pancasila ideology Development Agency, 2018), there are 5 strategic issues in inaugurated Pancasila, namely: the understanding of Pancasila, social inclusion, social justice, the institutionalism of Pancasila, and the example of Pancasila. The problem of Pancasila understanding; (1) The intensity of Pancasila learning has decreased, (2) lack of effectiveness and the appeal of learning Pancasila in the content and methodology, (3) there is a distortion of history, (4) socialization of Pancasila in general is superficial, compartmented, poorly planned, structured, and coordinated, (5) low in general community literacy resulting in declining reasoning and critical reason, (6) the understanding of Pancasila has not been fully developed scientifically, both through an intradisciplinary, multidisciplinary, and transdisciplinary approach.

The issue of social inclusion can be described as follows; (1) The current globalization carries the contestation of values (ideology) and interests leading to the strengthening of identity politization tendencies, (2) to strengthen the symptoms of social polarisation and fragmentation based on religious identity, ethnicity, class and The social classes, (3) The weak culture of citizenship, (4) Indonesia as a plural society lacks the development of knowledge and practice of multiculturalism, (5) The weakness of policy and leadership that pushes towards social inclusion.

The Indonesian nation has determined Pancasila as the basis of the country, so therefore, education in Indonesia must be based on Pancasila. Education has a strategic role in shaping the culture and character of the nation. Pancasila needs to be transferred to the basis of the real deed, therefore it is necessary to do the help of the educators so that they can become "agents of Change" (Suryohadiprojo, 2014, 19-20). Therefore it needs to be supported with learning media that can attract students to learn. Good learning media, hopefully can cover visual, auditory and motor aspects. It aims to facilitate students in learning and embedding concepts. "The more children senses are involved in the learning process, the easier the children learn and it becomes more meaningful. To support a meaningful learning process one of them is to use a well-packaged learning media and draw attention so as to motivate Shiva to learn and recall the knowledge and skills that have been learned. One of the media that can be used is a board of games that can involve students in the experience process and also internalize challenges, get inspired, be encouraged to be creative and interact in activities with fellow students when do the game (Setyaningsih, 2015, 966).

This research was conducted based on concerns on the condition of national situation that led to the strengthening of identity politics and increasingly reduced understanding of Pancasila so it is hoped that there is a breakthrough as an effort to make learning about Pancasila became more attractive, especially for children and adolescents. Through the field of visual communication design as applied art is expected to design a learning media that can be used to assist in the socialization or learning of Pancasila. In 2018 researchers in collaboration with the Pancasila Ideological Development Agency (BPIP) organized a workshop on Api Pancasila and made a game activity that uses the concept of snakes and ladders game, titled "Save Garuda", it then inspired to develop the game as a creative medium for the learning of Pancasila. Research that examines the snakes and ladders has been done, before but no one has done the research of snakes and ladders Pancasila. Research was developed based on the final task of students of design study of visual communication, Faculty of Art and Design of Universitas Tarumanagara, with the title "Interactive game board of snakes and ladders themed as the media learning in the nation and state", by Randy Hutama, 2018. The researcher is the student guidance lecturer who gives the idea/concept to make the board game snakes and ladders as a medium of learning Pancasila. After the trial of the final task is completed, changes and adjustments in design, format, rules, fixtures, and target audience are done.

Board games in general can be classified into 3 categories, namely: (1) War games aimed at destroying/ capturing opponents (chess, checkers, go); (2) racing games aimed at achieving the fastest objectives (parcheesi, chutes, snakes and ladders); (3) A game of alignment aimed at creating a particular pattern (tiuc-tac-toe, pegity). Board games are a source of entertainment and education in ancient cultures. The Egyptian frescoes depicting the Queen Nefertari (1304 – 1237 BC) play the Senet board of Games. Manacala stone planks carved on the roof of the temple in ancient Egypt. Mancala's game is seen by many tribes in Africa as one way to test the readiness of a boy to assume the responsibilities of maturity. Pachisi boards and tokens made of ivory and Ruby were found in India. Carved wooden planks and go game rocks are found in China and Japan. The go game was discovered Emperor Shun (2244-2206 BC) as a way of improving intelligence (Jeffrey, 2009, 4-5). There are several benefits of board games, namely: (1) Rules, train players to fulfill rules and be honest; (2) social interactions, engage players in cooperation, role-play, negotiation; (3) education, using certain themes and settings so that Provide knowledge and practice strategy, tactics, and decision-making; (4) Risk and simulation, players see directly from the decision and generate reciprocal relationship between players, so as to provide training/simulation in the life; (5) generation, does not require special skills/understanding so that it can invite all ages to play together (Mubarak, 2013, 9 - 11). Elements of board game: (1) goal, have a target/condition win, there is an element of competition that makes the game more interesting; (2) rules, determining what can and should not do, so that the player feels comfortable and directs the behavior of the player; (3) feedback, tell the player how they understand the aspect in the game, for example; scoring, money owned, or ranking, so that the players are motivated; and (4) voluntary participation, the game can only take place if the players approve and follow the game mechanism (Hidavatno, 2018, 11-12).

Board games as an educational medium are all forms of games that are designed to provide education and learning experience to players. Board games as an educational medium have been recognized by the education experts as one alternative media or learning techniques. Through the game, someone will feel involved to solve the problem and can also gain pleasure. The benefits of board games as an educational medium for children: (1) Help children develop themselves, (2) Improve children's communication skills, (3) Help children in creating new things or innovating, (4) improving the way of children's thinking, (5) improving children's feelings, (6) increasing children's confidence, (7) stimulating children's imagination, (8) training language skills in children,

(9) forming children's morality, (10) developing children's socialization (Darmadi, 2018, 36 – 40). Requirements to be considered in designing board games as educational media: (1) easy and simple design, (2) multifunctional, (3) interesting, (4) large, (5) durable and as required, (6) encourage children to play together, (7) develop the power children's fantasy and imagination (Darmadi, 2018, 54-55).

Previous research about snakes and ladders game in education was conducted with the title "Development of Physics Learning Media Using Game Snakes and Ladders Judging from Class VIII Student Motivation in Style Material". Based on the results of the research that has been done, it can be concluded that the learning media in the form of snakes and ladders games includes very good criteria in terms of student learning motivation. (Nugroho, 2013). The other research on snake ladder learning media entitled "Development of Snakes and Ladders Game Learning Media to Increase Student Learning Motivation and Social Studies Learning Outcomes in Elementary Schools". The results of the implementation of the snakes and ladders game learning media student learning motivation increased 66.7% in the aspects of learning activeness and enthusiasm for learning, while the aspects of interest in student learning motivation increased by 70%. (Afandi, 2015). Research on the snakes and ladders game media that was conducted in 2016 "Modification of Snake Ladder Games As Alternative Learning Media Addition and Reduction of Whole Numbers". The learning process of teachers is often less creative and innovative in the use of media so learning seems monotonous, less interesting and becomes difficult to understand. Based on the statement, it is necessary to use appropriate and interesting learning media for students. The game Snakes and Ladders is a game that is often found by children, the child responds that they feel familiar with this game. Snakes and Ladders can be used not only in mathematics but on other subjects it can be applied according to needs (Estiyani, 2016).

2. Experimental method

The design of this study is qualitative descriptive. The research subjects were students and young people who used to act as facilitators in training activities. The object of the research is the design of the Pancasila Snakes Ladders Boardgame made by the final-year student of the Universitas Tarumanagara, Faculty of Visual Art and Design, Randy Hutama. This research was conducted in Jakarta. The research instruments used were: image and sound recording equipment, writing equipment, and complementary purposes. To record the process that occurred, audio visual documentation was carried out during the event. Data analysis was conducted based on observations and interviews of simulation participants and observer. The results of the study were the prototype of the Pancasila snakes and ladders game from the design of the student's final assignment which was developed into a prototype to be simulated. The design approach use design thinking process: empathy - define - ideate - prototype - test.

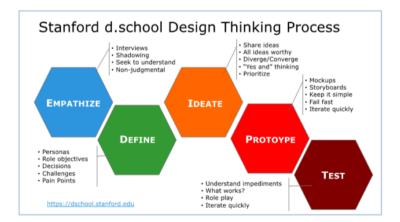


Figure 1: Design thinking process

- Empathize : Concern with the strengthening of identity politics that threaten the nation's life and increasingly diminishing the understanding of Pancasila
- Define : Pancasila needs to be introduced early with interesting learning methods.
- Ideate : Make learning media about Pancasila by using snakes and ladders games
- Prototype : Pancasila snakes and ladders game
- Test : Simulation done at various levels; elementary, junior high school, senior high school, and university.

3. Results and discussion



Figure 1: Pancasila snakes and ladders characters (4 male, 1 female)



Figure 2: Pancasila snakes and ladders characters (3 male, 2 female)

Character	Boardgame	Banner
Sila 1	Kevin, boy, from Java	Kevin, boy, from Java (different costume)
Sila 2	Mia, girl, from Kalimantan	Mia, girl, from Kalimantan
Sila 3	Kribo, boy, from Papua	Kribo, boy, from Papua
Sila 4	Joni, boy, from Sumatera	Jeni, girl, from Sumatera
Sila 5	Budi, boy, from Sulawesi	Budi, boy, from Sulawesi (different costume)

Tabel 1: Character comparation between boardgame and banner

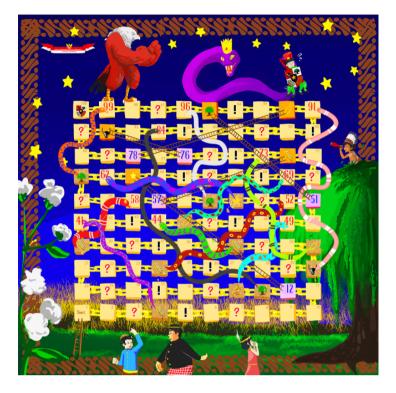


Figure 3: Pancasila snakes and ladders boardgame (60x60 cm)

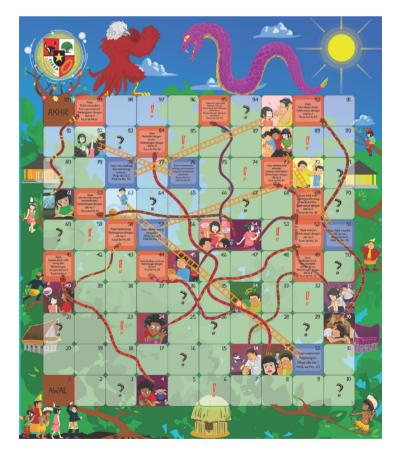


Figure 4: Pancasila snakes and ladders banner (600x700 cm)

Design	Boardgame	Banner
Dimension	60 x 60 cm	600 x 700 cm
Color	Dark color	Dark color
Box	Small box, separated	Big box
Illustration	on Card	on Banner
Character	4 boys, 1 girl	3 boys, 2 girls

Tabel 2 : Design comparation between boardgame and banner



Figure 4: Pancasila snakes and ladders Cards

Card	Boardgame	Banner
Snakes and Ladders	5 ladders, 12 snakes	No cards
Question	25 boxes, 30 cards	15 boxes. No cards
Action/ challenge	15 boxes, 3 challenge	10 boxes, 5 cards
Character	5 cards	No cards. Nametag
Shields	25 cards	25 cards

Tabel 3 : Cards comparation between boardgame and banner

There are several changes made, namely: rules of play, design, questions, activities/challenges, and equipment, as there are different format differences from small 60x60 cm game boards that are played by 5 people to be snake-sized games 600x700 cm wide which is played by 30 - 40 people, including the level difference/age. Simulation of snakes and ladders of Pancasila since April – August has been 5 times conducted at the level

elementary, junior high school, and university in Jakarta, Bali, and Yogyakarta.



Figure 5: Pancasila snakes and ladders simulation, SD Tarakanita Bumijo, Yogyakarta, 15 Agustusl 2019

4. Conclusion

- 1. Simulation of snakes and ladders obtains a positive response from participants, facilitators/ teachers/ observers.
- 2. Improvement of snakes and ladders of Pancasila consider the following things:
 - a. Rules of play (no format difference)
 - b. Character (composition of male and female)
 - c. Design (size, layout, color)
 - d. Card game (some are omitted/augmented/modified)
 - e. Questions and challenges (tailored to the level of education/age of participants)

Acknowledgment

We would like to thank all those who have supported this research, Ristek DIKTI, Untar DPPM, Chinese Indonesian Association, Grafisosial, and all those who have contributed so that this research can be carried out.

References

- Ahnaf, Mohmmad Iqbal, Samsul Maarif, dkk, *Politik dan Konflik Keagamaan*. Yogyakarya : Centre for Religious and Cross cultural Studies. 2015
- Afandi, Rifki, "Pengembangan Media Pembelajaran Permainan Ular Tangga Untuk Meningkatkan Motivasi Belajar Siswa dan Hasil Belajar IPS di Sekolah Dasar." *Jurnal Inovasi Pembelajaran*, Vol.1,No.1, Mei 2015
- Basarah, Ahmad, Bung Karno, Islam, dan Pancasila. Jakarta : Konstitusi Press (Konpress), 2017
- Darmadi, H, Asyiknya Belajar sambal Bermain, Bogor : Guepedia, 2018.
- Estiyani, Vinny Fuji, Ajo Sutarjo, Deni Wardana, Modifikasi Permainan Ular Tangga Sebagai Alternatif Media Pembelajaran Penjumlahan dan Pengurangan Bilangan Bulat. *Jurnal Kalimaya*, Vol. 4, No. 2, Agt 2016 Hidayatno, dkk, *Bermain untuk Belajar*. Yogyakarta : LeutikaPrio, 2018.
- Jeffrey, Hineboaugh. P, A Board Game Education, USA : R & L Education, 2009.
- Latif, Yudi, Revolusi Pancasila. Jakarta : Mizan, 2015
- Mubarok, Abdul, Board Game Pahlawan Kemerdekaan Ksatria Mahardhika,
 - https://elib.unikom.ac.id/files/disk1/607/jbptunikompp-gdl-abdulmubar-30317-7-babiir-v.pdf.
- Nugroho, Aris Prasetyo, Trustho Raharjo, Daru Wahyuningsih, Pengembangan Media Pembelajaran Fisika Menggunakan Permainan Ular Tangga Ditinjau dari Motivasi Belajar Siswa Kelas VIII Materi Gaya. *Jurnal Pendidikan Fisika*. Vol. 1, No. 1, 2013, Halaman 11.
- Setyaningsih, M.D., Dewi, N.R, Pengembangan Permainan Berbasis Science Edutainment Tema Makanan untuk Siswa kelas VIII, Vol. 4, No. 3, 965-972,
 - https://journal.innes.ac.id/sju/index.php/usej/article/view/8842
- Suryohadiprojo, Sayidman, Mengobarkan Kembali Api Pancasila. Jakarta : Kompas, 2014.