

# The Development of Reproductive Health Learning Game to Improve Students' Gender Awareness

Asrowi, Iman Ahmad Ihsanuddin, Mulyoto, Muhammad Hanif

**Abstract:** *Reproductive health learning needs more intentions and efforts to be successful. The use of appropriate learning media can positively help this problem. Learning games are important to be used by teachers to make the learning process in the classroom more interesting. The purpose of this study is to develop reproductive health learning games to increase gender awareness for junior high school students. The experimental design of pre-test and post-test was employed to evaluate the effectiveness of the games while the questionnaire was used as instruments to measure gender awareness. Qualitative and quantitative descriptive methods were used as data analysis techniques. The results showed a significant improvement in students' gender awareness from the pre-test with an average of 2.45 to 3.84 in the post-test. It can be interpreted that using learning games on reproductive health learning materials can increase gender awareness of junior high school students.*

**Keywords:** *learning games, reproductive health, gender awareness*

## I. INTRODUCTION

Better human resources quality can be achieved and created through the quality of education. Correspondingly, the process of gaining knowledge and skills through education is a form of investment in Human Resources and not as a consumptive activity. Investment in Human Resources through education can be expected to be a permanent and growing activity and can produce skilled people who can have increased abilities. So that these abilities and skills can be useful for human life in the future. Abilities and skills can be formed through learning activities [1]. Learning is an activity for everyone. Knowledge, skills, habits, preferences, and attitudes of a person are formed, modified and developed due to the learning process [2]. Therefore, the abilities and skills can be well-formed and can be produced through quality education. An indication of quality education can be fulfilled if the learning objectives can be achieved. Learning objectives can be accomplished optimally if the teaching component is well prepared. One factor in achieving learning goals can be influenced by good teaching components.

The teacher as the axis of the success of the learning process who always thinks and constructs the learning process is expected to be able to provide an active learning process by providing an interesting learning concept. The interesting concept of learning which makes

students more active can be conducted by developing interesting learning media, as media is one of the determinants of the successful learning. Through interactive media, the learning process can be more interesting and fun, so that learning can be joyful. Furthermore, students should be treated by their own interest. For example, students who have an interest in colour can be given a media with attractive colours. Likewise, students who like to creatively create a shape or object can be served a plasticine, geometry media, or images complete with paint as appropriate media to attract them. By using computer-based-technology media, attracting student is truly suitable. It is very helpful for students to learn more tasks, such as learning to count, read, and enrich knowledge.

A computer-based games program usually contains a lot of fun learning packaged for students, so that students do not feel that they are learning. Another important aspect of using the media is helping to clarify learning messages. Oral information is sometimes not fully understood by students, especially if the teacher is fluent in explaining the material. Here is the role of the media, as a tool to clarify learning messages [3].

Notional information becomes an obstacle to students in achieving learning objectives. This is because teachers still use lectures and other conventional learning methods in conveying information. The results of the preliminary study in two junior high schools which were recorded as the bottom-ranked schools based on data from the Wonosobo education office found that the learning material presented by the teacher is mostly still using a method of providing images and theoretical in taken from the teachers' module, book, and students' worksheet without any development to be more creative ones. From the problems in the preliminary study, it was found that students were not able to know the truth related to the theory, and not been able to visualize the theory presented by the teacher since experienced multiple interpretations.

This problem must be considered as serious and be anticipated because the problem arises in reproductive health material. It can potentially lead to several problems. Students will only interpret without knowing the real and it will be attached to themselves. Furthermore, because the information uses foreign languages, the teacher is not been able to explain the existing visuals, teachers' conventional thinking is also another problem. It is the reason the level of students' understanding of reproductive health is low and lead to the lack of students' gender awareness.

**Revised Manuscript Received on May15, 2019.**

**Asrowi**, Program of Educational Technology, Universitas Sebelas Maret, Surakarta, Indonesia

**Iman Ahmad Ihsanuddin**, Program of Educational Technology, Universitas Sebelas Maret, Surakarta, Indonesia

**Mulyoto**, Program of Educational Technology, Universitas Sebelas Maret, Surakarta, Indonesia

**Muhammad Hanif**, Program of Educational Technology, Universitas Sebelas Maret, Surakarta, Indonesia

Biology subject is one of the fields of study taught at a junior high school in Indonesia. In accordance with government regulation number 35 of 2013, the material for studying natural sciences such as physics, biology, and chemistry is intended to develop students' knowledge, understanding, and analytical abilities towards the natural environment and its surroundings. On that basis, biology learning at this level also carried out the principles of learning in accordance with Permendikbud no. 22 of 2016 concerning the standard process of primary and secondary education. In accordance with graduate competency standards and content standards, there are 14 learning principles that must be implemented in classroom learning processes. The principle of learning stated is the switching of the principle of learning from the teacher as the only source of learning to be learning based on various learning sources, from the textual approach to the process as strengthening the use of scientific approaches, and utilizing information and communication technology to improve the efficiency and effectiveness of learning.

The results of the preliminary study conducted by interviewing and documenting the reproductive health material, the teacher was still happy to use the lecturing method. Two teachers consider that it is still important in learning to run well the time. The students are also considered to have a good understanding of the module, textbooks, and students' worksheet as the only learning sources. The teacher did not yet utilize the existing facilities in the school as a supporting tool for the application of modern learning by utilizing LCD projectors, computer laboratory, sound set, and laptop as interesting learning media.

While the results of the preliminary study related to learning activities on reproductive health learning showed that still found students who still cannot fully receive information related to the unfamiliar Latin terms in reproductive health which results in mispronunciation of terms. In addition, images or visualizations provided by the teacher to students make unplaced time distribution to be used by students to play by them. The images provided cannot attract students to pay more attention. This causes the condition of learning activities in the classroom is not conducive. The material provided by the teacher has not been able to be integrated with the real world so that the students become confused and bored and not even interested in participating the lesson. It can be seen by the students who tend to be quiet in class. The lecturing method applied by the teacher makes learning centralized on the teacher so that students can only listen, understand, and see the images given by the teacher.

Those situations impact the students' condition. They experienced a lack of interest in learning due to less attractive learning methods applied by the teacher. Students seem to make a joke with their friends while the condition of the class is still on lecturing. The foreign terms and theories that students must understand focusing students more on listening and memorizing and can illustrate themselves to understand their capture.

Internet access and supporting facilities for the modern learning process are apparently hampered by the lack of competence and mastery of information technology in teachers. Moreover, the teacher's mind-set is comfortable, relaxed, and fast in using the lecturing learning method rather than preparing an interesting learning media. It turns out to have an impact on the low gender awareness of students. Looking at the percentage of learning outcomes where 55% of students are passed the standard and 45% are failed reach the standard. This means that students' knowledge of reproductive health is sufficient but their synchronization with gender awareness still needs to be improved. The tests given are only about memorized material related to terms, not at the implementation stage in the real world. That is also a problem for students to visualize their knowledge.

One of the simple and attractive learning media used to get students' attention is game. The game can be an easy alternative media applied by the teacher. The game is able to be combined with the lecturing method and provide learning motivation to students. The ease and presence of animations that drive student interest to make learning more attractive and interesting. Realistic videos and exciting games can be applied to learning games. So that students can understand and interact with the real world.

The use of educational games in learning environments is an increasingly relevant trend. The motivational and immersive traits of game-based learning have been deeply studied in the literature, but the systematic design and implementation of educational games remain an active topic. In this study, some relevant requirements for the design of educational games in online education are analysed, and a general game design method that includes adaptation and assessment features is proposed. Finally, a particular implementation of the design is described in light of its applicability to other implementations and environments [4]. Finally, the certain design is explained with respect to their application to implementation and its environments.

The opinion above can be interpreted that learning games should be arranged in a structured. An appropriate and coherence learning game design can provide a plus point for the quality of learning games. Interesting learning games which are in accordance with the learning objectives can support tasks to reach a learning target. Besides that, the fun activities can be applied in learning, so students will feel playing even though the student is studying. Learning games can be considered as an alternative in the use of learning as a support for classroom learning activities.

The learning game developed in this study is a combination learning game between the athletic and computer games. Besides that, this learning game is developed through compatible software with various types of computers. The reason for developing this learning game comes from the majority of students who are happy with athletics and enjoy playing games, so this development is directed to athletic computer games. Besides that, learning games can bring fun, humorous and relaxed atmosphere without leaving the main elements of learning



material. Because of these explanations and underlying problems, the

writer conducts the research entitled the development of reproductive health learning game to improve students' gender awareness.

### 1. Multimedia

Multimedia is the use of computers to create and combine text, graphics, audio, moving images (video and animation) by combining links and tools that allow users to navigate, interact creatively and communicate [5]. Multimedia is a highly effective, engaging, and innovative way to capture and harness stakeholders' collective.

Knowledge in managing risks and opportunities [6].

In addition, the notion of multimedia is a created media that combines various other types of media, such as visual and auditory incorporation. By using multimedia, almost everyone becomes easier to receive information. One form of multimedia is an animation that combines images and sound [7].

There are four important components in multimedia. First, there must be a computer that coordinates what is seen and heard and how to interact with. Second, there must be a link that connects us with information. Third, there must be a navigation tool that guides us exploring interconnected information networks. Fourth, multimedia must provide a place for the user to collect, process, and communicate our own information and ideas [5].

In addition, four functions of learning media, namely: Attention function is the core function of the media that is to attract and direct the attention of students to concentrate on learning material related to the visual meaning conveyed or accompanying the learning material. The effective function is related to the feeling of pleasure that students have when participating in learning activities. Cognitive function means that visual or image symbols can facilitate the achievement of learning goals to understand and remember information or messages contained in images or learning media. The compensatory function means that the media serves to accommodate or help students who are weak and slow to accept or understand learning material presented with text (verbal) [8].

From some theory about multimedia above, it can be drawn that multimedia is a combination of several tools such as video, audio, image, animation, text, art, and also can be a navigation to convey information. While the multimedia components needed from the multimedia, system include cameras, video recorders, personal computers, storage media, and others.

### 2. Learning Games

Learning games can also be called educational games. Learning game in the current era has become a breakthrough in learning media to provide long-term memory stimulus to students. The main aim of the educational game is to stimulate students to complete the game and reach the learning process. The purpose of educational game design is to support learning content in the gaming environment. The

gaming environment is divided into five main areas, namely board games, card games, athletics game, children's games and computer games (includes an educational game in the gadget). Within these limits, the gadget still provides positive benefits for children. Playing that can train children's creativity is playing by building or composing. While the game through gadgets is not provided this term maximally. There are only images games (composing puzzles, colors matching etc.) rather than building or composing in three dimensions media such as blocks, legos etc. Even though the game is a way and media for children to build their intelligence, using a smartphone or other gadget as media seems to be inappropriate to low-level students. In addition, learning games are familiar, fun, and close to students. The use of games aims to reduce their level of saturation with the lesson [9]. The functions of learning media are: Clarifying the message so that it is not too verbal content, Overcoming the limitations of space, time, energy and sensory power, Bringing the spirit of learning and interacting directly between students and learning resources, Allows students to learn independently according to their visual, auditory, and kinesthetic talents and abilities, In addition, students can provide the same stimulus, compare experiences, and give rise to the same perception [10].

Learning games are important because children will be responsible with each other by playing games that are approved after one child offers to show the other how to play. Conflict develops during matches and disputes are built on previous disputes, especially in relation to claims made about knowing how to play [11].

Motivations are framed through significant relationships in order to direct the child's emergent behavior into sequences of competent action. Isolated competencies are guided into simple and delimited domains of social activity like games and, later, more complex and interpretive structures like paradigms and ideologies [12].

It can be underlined that learning games are modern learning media which capable to arrange text, images, videos, and audio to be controlled and moved so that they can be used for interesting learning processes.

#### a. Reproductive Health

In a simple way, reproduction comes from the word re which means return, back or again and production which means making or producing, so reproduction means a process of human life in producing offspring for the sake of survival. Reproductive health is a complete state of physical, mental and social well-being in all matters related to the reproductive function, role, and system [13].

Parental communication on sexual and reproductive health is influenced by high (SES), family religiosity, parent sexual knowledge, parent discipline, and trustworthiness. Interventional programmes on communication about sexual and reproductive health need to take cognizance of these factors to improve parent-child communication about sexual and reproductive health [14].

The meaning of reproductive health is a healthy condition concerning the reproductive system, function, and process of a certain person. Healthy here does not mean solely free



from illness or disease, but also mentally and socially-healthy [15]. It can be emphasized that reproductive health is a healthy condition of the organ system, organ function, physical, mental and social for both male and female.

The basic knowledge that needs to be given to adolescents so that they have good reproductive health is: Introduction to the reproductive system, process, and function (aspects of adolescent development), The need for adolescents to mature the age of marriage and how to plan a pregnancy to suit their desires and partner, Sexually transmitted diseases and HIV / AIDS as well as their effects on reproductive health conditions, social and media influences on sexual behavior, sexual violence, and how to avoid them. Communication skills include strengthening self-confidence to be able to counteract negative things and reproductive rights [13].

In the setting of junior high school, Reproductive Health is taught in Biology Subjects. The reproductive health information is necessary for teen and adult education. The absence of comprehensive sexuality and reproduction education into the national education curriculum make the message of this topic hardly understood [16].

#### Gender

Gender is a complex of socially guided perceptual and interactional and micropolitical activities that cast particular pursuits as expressions of masculine and feminine features and as such is routine accreditation. Note the distinction between gender, sex categorization, and sex. Sex is understood to be the application of biological criteria, which has been socially agreed upon [17]. Gender is a trait inherent in men and women constructed socially and culturally.

Gender is the difference trait that appears in men and women based on the values and behaviors they do. For example, women are known to be gentle, emotionally, beautiful, and motherly, while men, on the contrary, are considered as strong, rational, male and mighty. Sex is an identical division that is biologically determined and adheres to certain sexes such as male reproductive organs having a penis, sperm, mustache etc., whereas women have reproductive organs for ovum, vagina, and breastfeeding. All these differences are biologically and attached to individuals so that their functions cannot be exchanged. It is permanently unchanged and is a biological provision or gift from God. Then, gender is the division or differentiation of categories of men and women culturally constructed. Thus gender is a socio-cultural construction on the sex differences between men and women which has different meanings with of sex as a physical identity [18].

The opinions above can be highlighted that gender is a male or female trait that builds on the social and cultural environment that makes behaviour and values.

#### b. Understanding of Gender Concepts

To understanding the concept of gender is one of the beginnings of the formation of gender awareness. When someone understands what gender is and the concept of gender, the person will be aware on has his or her gender traits. Shaping perspective is a strategy to include gender awareness as habitual in the community. To create an awareness community should consciously include gender

concept understanding in a real situation. Gender curriculum is a way of mainstreaming the organization to educate about gender concept. Gender concept as knowledge is part of modern education. The policy of gender mainstreaming is existed mandatory policies in Indonesia, through the instructions of the President of the Republic of Indonesia No. 9 of 2000 concerning gender mainstreaming in national development. The instructions stated in the instruction are implementing gender mainstreaming for the implementation of planning, formulation, implementation, monitoring, and evaluation of national development policies and programs that have a gender perspective in accordance with each field of duties and functions, as well as their respective authorities. Understanding gender concept should be clearly clarified so that the arrest of a person and policy can implement a welcome social community for all gender without any discrimination [19].

Gender concepts developed include: Gender difference, namely differences in character, behaviour, expectations formulated for each person according to gender, Gender Gap, namely differences in political relationships and attitudes, among others, women, genderization, namely reference the concept of gender placement on self-identity and other people's views, Gender identity, namely the behaviour that should be owned by someone according to their gender, Gender Role, namely the role of women and the role of men that is applied in real form according to local culture [20].

Gender is a changeable distinction between women and men made by society. It is influenced by culture, religion and the State. So that it can be exchanged or reconstructed socio-culturally based on community agreement [21].

## II. METHOD

This study used Research and development (R & D) design. R&D is a research to produce a tool based on need then tested and seen the level of its effectiveness [22]. The type of research used in this study is a type of development research used to develop products in the form of reproductive health learning games using CDs on Biology subjects for Eight Grade of Junior High School. This product is expected to provide information completely related to knowledge about reproductive health, providing breakthrough learning media in accordance with the characteristics of student learning styles, and can assist teachers in conveying information.

The research procedure used in this study is the ADDIE developmental model. It was popularized in the 1990s by Reiser and Molenda. ADDIE development model stands for Analysis, Design, Development, Implementation, Evaluation [23].

## III. RESULT

### *Development Stages*

The explanations of each research stages are as follows: Analysis. In the analysis there are 2 studies that are conducted, they were preliminary and literature study. This preliminary study surveyed 2 Biology teachers



in different schools in Wonosobo District. The data collecting in this preliminary study stage used interviews and observations. The interviews were conducted to find out the use of instructional media by the teacher, observe the results student learning and to find out the form of Biology teaching materials used. To see the Biology learning process and determine the condition of Biology learning in the classroom, the observations are carried out. Data from interviews and observations are useful for obtaining information related to problems, needs of students and as an appropriate solution to overcome a problem. The literature study was conducted to examine the theory of relevant research results in accordance with the potential and development needs. In addition, literature studies are carried out to be a scientific foundation of a product that will be produced later. The result of this analysis stage has been explaining as the background of research.

The analysis stage includes the following activities: conducting competency analysis that is demanded by students, especially on reproductive health materials, analyzing the characteristics of learners about the knowledge, skills and learning styles, as well as aspects that are bound in, conducting material analysis in accordance with competency requirements, finding appropriate and interactive material will be put into learning games, and analyzing the computer specifications that will be used for the development of learning games.

After setting all of the requirement, the second stage was Design. This stage is carried out based on the terms of reference as follows: to whom is the learning game designed for? what is the desired ability to learn? and how can the subject matter be applied in learning games well?. In this case, the learning game design is intended for students of junior high school level. The students are expected to understand reproductive health so that it can improve gender understanding. Reproductive health subject matter is designed interactively and easily understood by students.

The other basis of design stages are: how can learning games determine the level of mastery of reproductive health in biology subjects so that students' understanding of gender concept will increase. In this case, the learning game is presented not only or learning process but also is equipped in assessment and evaluation place. This learning game is arranged based on the learning game flowchart: start, material (in the form of interactive video), the material in learning games, and assessment test.

The next stage was Development. Development phase includes activities to collect reproductive health learning materials, gender, the relationship between reproductive and gender concept understanding, and character building learning games. The development process took some activities on layout creation designing learning games, making audio or music instruments in learning games, illustration drawings, short videos about reproductive and gender health, typing storyboards, typing video, and learning games scripts, and other supporting learning game content. Then the activities of compiling learning games with computer software can be done.

In this development stage, the initial product of learning games was made based on the design that has been planned. Learning games are made by using the help of application

software Microsoft's Office PowerPoint 2010 as the main tool. The other supporting software such as Corel Draw & Adobe Photoshop is useful for making image layouts and character images. The audio set on this learning games uses Audacity as a software for making and changing audio. The video content was made by using Cyber Link Power Director 13 creation software. Then other additional supporting software was Format Factory as a software that is useful for changing the extension format of a file. The material displayed is the explicit reproductive health of adolescents. In the learning game developed is completed by practice questions that support the needs of students for elaboration.

This stage is also contained product design validation to make sure the quality of the initial product. The product design validation includes validation of material and media. Material validation aims to adjust the material in the learning game and to find out the feasibility of presenting material in learning games. It is very important therefore the feasibility of the material in the learning game must be scientifically valid before the use. Material validation is carried out by material experts who are educational practitioners in the field of biology and reproductive health studies. To find out the validity of the material in the learning game used data collection instruments in the form of material feasibility questionnaire which includes aspects of material suitability, presentation feasibility and the feasibility of the language used.

Then the next validation is media validation. Media validation is carried out by media experts related to media feasibility. The validation is taken by Boyolali District Educational Multimedia Forum (FORMULASI). The assessment is carried out using a media feasibility questionnaire covering aspects of the display, navigation, and multimedia learning principles.

From the results of the validation of each subject showed that the product was quite feasible to use. The result of materials validation showed the average score of 4.60 (from 5.00 scale) from two experts. It was categorized as excellent. Thus, the result of media validation showed the average score of 4.15 from three experts. It was categorized as good.

After the validation, the next step was designing revision. Products that have been validated through questionnaire and expert discussion, was revised based on its deficiency found. Assessment in the form of input and suggestions from each expert is used as an improvement material for initial learning game products revision. After the design revision, the product feasibility test is very necessary. The feasibility of the product test aims to determine the feasibility of the product developed before the product is implemented in the actual learning activities. This feasibility test is taken by the target user so that usually called as user validation. Products can be declared feasible if they meet the criteria Good or Excellent. The following is the product eligibility criteria sheet.

The result of user validation from 10 students showed the average score of 4.30 (from 5.00 scale). It was categorized as excellent so that the initial user assumed that the media

positively can help them in learning.

The initial developed learning games look can be seen as below.



Fig 1: Template of learning game

After the instrument and media have been declared eligible to be used by the validators, the next stage is to implement the learning games in Eight Grade of Junior High School student. The implementation aims to measure the effectiveness of the product being developed. At this stage, the products developed can be applied in learning through product trials. This product trial can be carried out three times, namely: One-one trial, small group trial, and operational field trial. The activities during the implementation stage are: first, doing the pre-test activity; second, introducing the media to students; third, all 56 students use the learning media in their learning activities; fourth, the students study together guided by the researchers as their teachers by using the direct learning model; fifth, at the end of the learning process, the researchers give the students a questionnaire of gender awareness as post-test activity.

The last stage is an evaluation. Evaluation is done to determine the effectiveness of the use of learning games. Evaluation can be done in two ways, namely summative evaluation, and formative evaluation. Formative evaluation is done to revise or improve the product developed. The formative evaluation itself has been done in the product validation process and product testing. While summative evaluation is done to measure the effectiveness of products in terms of student learning outcomes on gender awareness.

To measure the effectiveness of the product can be done through several testing steps, namely normality, homogeneity, and paired sample t-test.

#### Analysis of the Effectiveness of the Product

Analysis of product effectiveness test can be done by paired sample t-test. Before carrying out the t-test, several prerequisite test steps should be taken including normality and homogeneity test. Normality test is a test conducted in order to assess the distribution of data in a data group or variable, whether the distribution of data is normal or not. Homogeneity test is a test to determine whether the variances of a number of populations are equal or not. Homogeneity test was carried out on the test results data from the experimental group and the control group.

Paired sample t-test aims to determine the extent to which the product that has been developed is effective to improve learning outcomes. The test data on the effectiveness of the product is obtained from the results of pre-test and post-test tests. Products can be categorized as effective if there are differences in learning outcomes between the experimental

and the control class. The calculation of the effectiveness test uses the Paired Sample T-Test.

#### Analysis of gender awareness level

The results of the gender awareness questionnaire will be searched for the mean value and then will be concluded to find out the level of gender awareness. The conversion of questionnaire results using a scale of 5 according to Sudijono[24] is illustrated through the table quantitative to quantitative data conversion guidelines:

Table 1: Quantitative To Qualitative Data Conversion Guidelines

Interval Score	Value	Category
$X > 4.21$	5	Very Good
$3.40 < X \leq 4.21$	4	Good
$2.60 < X \leq 3.40$	3	Enough
$1.79 < X \leq 2.60$	2	Less
$X \leq 1.79$	1	Very Less

In this study, the type of evaluation used was an only a formative evaluation, because this type of evaluation was related to the stages of development research to improve the effectiveness of the learning games produced.

The test is taken using pre-test and post-test in two schools in Wonosobo, with a total number of 56 students. Based on the results of the calculation of paired t-test, students' average score increased significantly from 2.45 to 3.84 in the post-test. It can be interpreted that learning using learning games on reproductive health material can increase gender awareness of junior high school students in Wonosobo.

#### IV. CONCLUSION

The conclusions that can be drawn from this research are that 1) The process of developing reproductive health learning games have passed through the stages of review and validation by material and media experts to reveal its media eligibility. The learning games were declared eligible to use and test it to 56 eight grade students at Junior High Schools. The learning game is easy to operate, interesting, simple, and useful. 2) The learning games as an eligible teaching media are scientifically proven can increase students' gender awareness. 3) This learning game is made using presentation software through development stages of analysis, design, production, testing, revision, finalization, and mass production stages. This learning game developed, can be applied to biology subjects of reproductive health material at the junior high school level.

#### ACKNOWLEDGEMENT

This research was fully supported by Universitas Sebelas Maret. We thank our colleagues from the Department of Educational Technology who provided insight and expertise that greatly assisted the research, although they may not agree with all of the interpretations or conclusions of this paper.



## REFERENCES

1. M. Ali, Pendidikan untuk Pembangunan Nasional: Menuju Bangsa Indonesia yang Mandiri dan Berdaya Saing Tinggi. Jakarta: Grasindo, 2009.
2. Hudojo, Belajar dan Pembelajaran Modern: Konsep Dasar, Inovasi dan Teori Pembelajaran. Yogyakarta: Garudhawaca, 2017.
3. R. Susilana dan C. Riyana, Media Pembelajaran: Hakikat, Pengembangan, Pemanfaatan, dan Penilaian. Bandung: CV Wacana Prima, 2009.
4. D. Burgos, "Educational game design for online education," *Comput. Hum. Behav.*, vol. 24, no. 6, pp. 2530–2540, 2008.
5. Hofstetter, Pedoman Praktis Multimedia dengan Authorware 7. Yogyakarta: CV Budi Utama, 2017.
6. M. Loosemore, "Using multimedia to effectively engage stakeholders in risk management.," *Emerald Group Publ. Ltd.*, vol. 3, no. 2, pp. 307–327, 2010.
7. B. Soeherman dan C. Halim, Membuat Sendiri Klip Animasi Multimedia. Jakarta: Elex Media Komputindo, 2008.
8. Darmadi, Pengembangan Model dan Metode Pembelajaran dalam Dinamika Belajar Siswa. Yogyakarta: CV Budi Utama, 2017.
9. J. Wijanarko dan E. Setiawati, Ayah Ibu Baik Parenting Era Digital: Pengaruh Gadget pada Perilaku dan Kemampuan Anak Menjadi Orang Tua Bijak di Era Digital. Jakarta: Keluarga Indonesia Bahagia Bumi Bintaro Permai, 2016.
10. R. H. Simamora, Buku Ajar Pendidikan dalam Keperawatan. Jakarta: EGC, 2009.
11. C. Davidson, "When 'Yes' turns to 'No': Young children's disputes during computer game playing in the home," *Emerald Group Publ. Ltd.*, vol. 15, pp. 355–376, 2012.
12. D. Peterson, "The Ivy and the Trellis: Agency, biology, and socialization," *Emerald Group Publ. Ltd.*, vol. 30, pp. 293–315, 2013.
13. F. Efendi dan Makhfudli, Keperawatan Kesehatan Komunitas: Teori dan Praktik dalam Keperawatan. Jakarta: Salemba Medika, 2009.
14. A. Manu, A. M. Kotoh, R. K. O. Asante, dan A. Ankomah, "Factors associated with parental communication with young people about sexual and reproductive health: A cross-sectional study from the Brong Ahafo Region, Ghana," *Emerald Group Publ. Ltd.*, vol. 116, no. 6, pp. 595–610, 2016.
15. W. Rajab, Buku Ajar Epidemiologi untuk Mahasiswa Kebidanan. Jakarta: EGC, 2009.
16. GKIA, 1001 Langkah Selamatkan Ibu & Anak. Jakarta: Puspa Swara, 2016.
17. S. Kumra, R. Simpson, dan R. J. Burke, *The Oxford Handbook Of Gender In Organizations*. Oxford: OUP Oxford, 2014.
18. Ruminati, Sosio-antropologi pendidikan suatu kajian multikultural. Malang: Gunung Samudera, 2016.
19. W. M. Santoso, Ilmu sosial di Indonesia: Perkembangan dan Tantangan. Jakarta: Yayasan Pustaka Obor Indonesia, 2014.
20. A. Rokhmansyah, Pengantar gender dan feminisme. Yogyakarta: Garudhawaca, 2016.
21. M. Julijanto, Agama Agenda Demokrasi dan Perubahan Sosial. Yogyakarta: CV Budi Utama, 2015.
22. A. D. Maturidi, Metode Penelitian Teknik Informatika. Yogyakarta: CV Budi Utama, 2012.
23. T. Sutarti dan E. Irawan, Kiat Sukses Meraih Hibah Penelitian Pengembangan. Yogyakarta: CV Budi Utama, 2017.
24. A. Sudijono, Pengantar Statistik Pendidikan. Jakarta: PT. Raja Grafindo Persa, 2009.