

DEVELOPMENT LEARNING MODEL OF CHARACTER EDUCATION THROUGH E-COMIC IN ELEMENTARY SCHOOL

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Abstract

The research was aim to develop a learning model of character education through e-comic in elementary school. Development theory was used a modification development theory of Plomp and Borg and Gall with the following steps: (1) the initial research (literature study field study) (2) design (design model and the media), (3) realisaasi / construction (design assessment-revisi design) (4) test, evaluation and revision (improvement products hypothetical) (5) implementation (pre and Post test effectiveness test)

The research was showeddeveloplearning model in character education consists of five phases and test effectiveness fromlearning process as indicated by the increased value of character in students through observation and value student achievement.

1. INTRODUCTION

A nation will not go forward, before there was classed teachers who likes to sacrifice for a nation. According to this formula, the advancement of two key words are teachers and sacrifice. Thus initial rise of nation should start by scoring the teachers who love to make sacrifices. The teachers do not just meanteachers in formal classes. Teachers are leaders, parents, and educators. Teachers are role models. Teachers are digugu (inaudible) and replicated (copied). Teachers do not just teach how to answer the question of skilled national examination, but himself and his life should be an example for his students. The education was entered in Indonesian now a period that is very strange. Accompanied by a variety of funding major breakthrough program appears to be able to solve the fundamental problems in education, namely how to publish Indonesian human excellence, faith, piety, professionalism and character.

The students was committed deviant acts make education an urgent character to be applied at various levels of schooling. The foundations a strong of character, would made students also able to compete in the future in the international arena. Indonesian faces streaked education with various news slant. Start it called action brawl, bullying, drug abuse and alcoholism, promiscuity among students that lead to abortion and the other. However much

students an Indonesian, who managed to carve achievements in various fields and recognized worldwide. The facts were showed it time for character education back strengthened through education in schools. The Government has launched the implementation of character education at all levels of education starting from elementary school. The Minister of national education said that education at the elementary character gets a larger share than the other levels. It was been more easily taught and soul inherent in children until adulthood. Because if it was not formed from an early age, it would be difficult to change a person's character in the future.

The character education would be implemented in schools do not teach in specialized subjects. "However, the study carried out in everyday which has been proceed at schools,". The character education should be able succeed the process internalization of moral values. "So, rather than simply knowing what is good and bad". A student must also be able to apply these values correctly in their daily lives,". The character education is a system cultivation of character values to the school community, which includes knowledge, awareness or willpower and actions to implement these values, both to God (Almighty), ourselves, the others, the environment, or nationality, thus becoming a perfect man. Prayito (2011) in his research shows that intelligence and good character in students can be improved rehabilitated and reconstructed in the learning process and help with e-learning.

The methodology was taught there are two most prominent aspects the model of learning and teach media as teaching tools (Sudjana, N., & Rival, A., 2010: 1). Media is one determinant success of student learning. The learned on activity and process occurs, was transferred information from the source to recipient information through the model and certain media. The learning with model and media were attracted and equipped with hasanah character of a nation, the students more receptive to learn information in order to reach learning objectives. According to Schramm (1984: 386) some less of media text books for example "not live", only showed die picture, not able to present sound and easily outdated. Teachers must worthed to develop their own models and instructional media attractive, economical, effective, and easy to made. The teacher as a facilitator should be able to provide facilities that enable ease of teaching and learning.

The research was resulted from Surtino (2003) with the title "The comic of clamat, use of comics as a linguistic mediator" showed that by use media of comics can encourage development diagram mental or logic used mathematical symbols particular, pushed to remember formula or understand problem situation is better and relationship between data on a

particular problem. This fits research of Achmad Buchori (2011) with the title "development of teaching materials based FlipBookmaker mathematics learners to build intelligent and humane" showed that students were more enthusiastic to follow the lesson if the teacher use FlipBookmaker in learned and students was not made saturate. The research of result was reinforced by Hadi (2008) with the title of "learned addition and subtraction of fractions by using the medium of comics in class III Elemntary School Muhammadiyah 08 Malang" showed that by use media of comics students could made feel happy, relaxed and feel not tense in the course.

The technology was improved requires teachers to innovative and creative in the media to be held on learn process. Titik haryati (2012) showed that students were more interested in learning the material with the illustrations in every passage, it maked easier for students to understand. Abdul Malik (2012) also submitted the results of his research that the students in junior high school really liked teachers made instructional media such as comic as it eases the appropriate level of abstraction students thinked degree at junior high school in the concrete operational stage. Based on the description above considerations, to resolve problems of development research conducted under the title "development learning model of character education through e-comic in elementary school". This study developed a learning model of education through e-comic character and effectiveness of these models in the learning process.

2. LITERATURE REVIEW

2.1 Definition of Character Education

The moral education strengthened or character educational was very relevant in present context to overcome the moral crisis that swepted our country. The crisis was among others by increased promiscuity, rampant levels of violence children and adolescents, crimes against friends, theft teens, the habit of cheating, drug abuse, pornography, and destruction of property from the others has been become a social problem that until now has not been able to completely resolved, therefore the importance of character education.

According Lickona, related to the concept of moral character, moral attitudes, and moral behavior. Based on three components can be stated that the characters are well supported by knowledge of good, desire to do good, and do deeds of kindness. Chart belowed is outlined of the third link this framework.

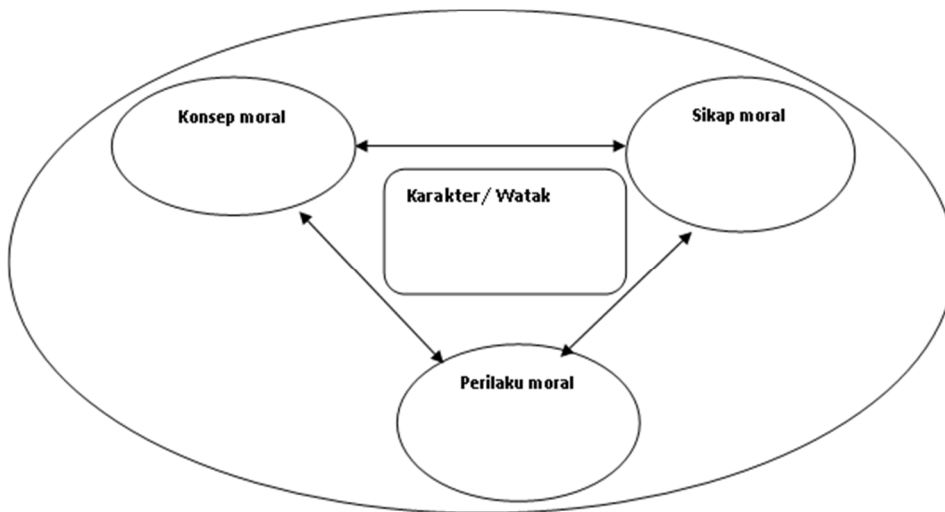


Figure 2.1 The linkage between moral component in the framework of the establishment
Good character according Lickona

The Character Education Understanding According to Professional

1. The Character Education According Lickona

The character education simply put can be defined as any attempt to do influence the character of students. But to know the proper sense, it can be stated here the definition of character education delivered by Thomas Lickona. Lickona stated that the definition of character education is a deliberate attempt to help someone so that he can understand, attention, and do ethical values that core.

2. The Character Education According Suyanto

Suyanto (2009) defined the character as a way of thinking and behaving that was characteristic of each individual to live and work together, both within the family, community, nation, and state.

3. The Character Education According Kertajaya

The character is characteristic that owned by an object or individual. Characteristic is genuine and rooted in personality or individual objects, as well as "engine" that drives how an act, behave, say, and respond to something (Kertajaya, 2010).

4. The Character Education According Dictionary of Psychology

According the dictionary of psychology, personality character is to be reviewed from the standpoint of ethical or moral, for example a person's honesty, and is usually associated with the properties are relatively fixed (Gulo, D., & Kartono, K., 1982).

There are 18 items the values of character education namely, Religious, Honest, Tolerance, Discipline, Work Hard, Creative, Independent, Democratic, Curiosity, Excitement Nationality, Love Hard Work, Appreciating the achievements, Friendly / communicative, Love Peace, Joy of reading , Care for the Environment, Social Caring, Responsibility. Described in figure 2.2 below:



Figure 2.2. 18 character values of the nation

The character education has been become a concern to many countries in order to prepare next generation of quality, just not benefit individual citizens, but also for citizens as a all. The character education can be defined as the deliberate us of all dimensions of school life to foster optimal character development (we deliberate effort of entire dimension life at school / madrasah to help the formation of character optimally.

The character education required special methods appropriate for the purpose of education can be achieved. The appropriate among learning method is an exemplary method, the method of habituation, and methods of praise and punishment.

2.2 E-comic as a media of learning

Comic is a series of pictures included in the box that contains a whole series of a story. The pictures were usually equipped with speech balloons and accompanied by narrative explanation (Shadely, 2003). Meanwhile, Trimo (2011) describes the comic medium can be

divided into two, namely the comic strip and comic books. The comic strip is a form consist of several sheets frame column published in a newspaper or magazine, usually connected story, while the comic book in question is in the form of a comic book. Thus, it can be interpreted as a comic picture book containing messages through illustrations and written text. These books contain a variety of themes are often based on the experience of the child's daily life. Characters in the book can be either humans or animals are shown in terms of human qualities, character, so that children can understand and relate to personal experience.

Learning is combination that include elements arrayed human, material, facilities, equipment, and procedures that influence each other to achieve the learning objectives (Oemar Hamalik 2001: 57). The media used of instructional in teaching and learning can generate desire and new interests, raise motivation and stimulation of learning activities, and bring psychological effects on students. In addition to motivating and interests of students, learning media can help students improve comprehension, presenting interesting and reliable data, facilitate interpretation of the data, and condense information.

E-comic is currently widely used in learning. According Darin E. Hartley, E-comic is a learning that allows submite teaching materials to students using figure online media on the internet, intranet, or other computer network media. According to Martin Jenkins, E-comic is a learning process based on narrative picture that facilitated and supported through the use of Information and Communication Technology (ICT). So learnedby the internet can be help categorized in E-comic.

FlipBookmaker is one category in the E-comic. The FlipBookmaker made students can use in the search for teaching materials in accordance with their respective class. In this research will use FlipBookmaker benefitin teaching character education based of learning model.

According Arief Sadiman et al. (2006: 100), the order to develop media education is as follows:

1. Analyze needs and characteristics of students.
2. Formulate instructional purposes.
3. Formulate particles of matter in detail that supports achievement of goals.
4. Develop a gauge of success.
5. Write a script media.
6. Conducting tests and revisions.

2.3 Development Learning Model of Character Education

Miarso (2005) interpret term as a learning activity that focus on conditions and interest of learning (learning centered). The term learn was used to replace term teach more as activities focused on the teacher (teacher centered). The term learning a broader meaning than term of teaching. Teaching was only a transfer of knowledge from teacher to student, while learning has a broader meaning, activities starting from design to develop, implement, and evaluate activities that can create learning process. Thus, learning is a process that intentionally designed to create individual learning process.

Many instructional was design offer by professional, one general model of design education according by Plomp (1997) the objective of the study educational development were (1) to increase the practical relevance of educational research (2) ambitious educational reform that requires a fundamental change in approach to literacy in looking at differences problems and needs, there is no certainty about the effectiveness of interventions in different contexts and importance of implementation, (3) the research was less traditional provide a suitable solution to problem sound (too narrow and too artificial eyes context). There are five phases: (1) the research initial (2) design (3) realization / construction (4) test, evaluation and revision (5) implementation. Look at figure flowchart below:

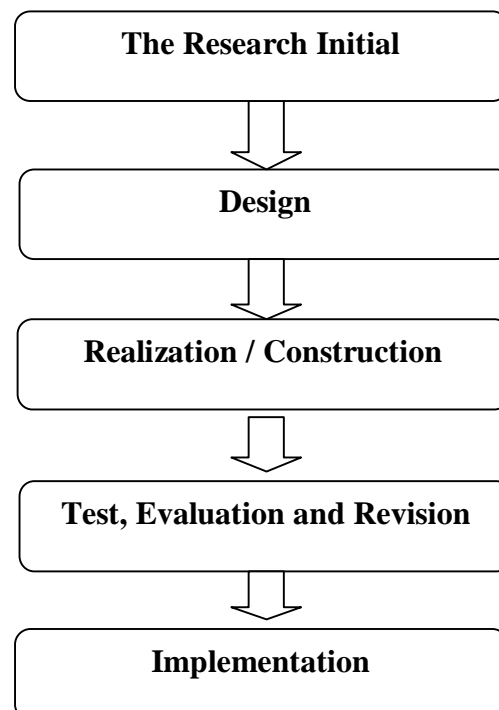


Figure 2.3 Design Research & Development Plomp (1997)

3. RESEARCH METHODS

3.1 Approach and Type of Research

The research purpose to develop a learning model of characters education through e-comic in elementary school, correspond with these objectives, the type of research was development of research modification. This is correspond with opinion of Borg and Gall (1983) and the design of R & D Plomp states that main objective is development of research to develop an effective product that can be used in schools. The product was not confined in question to concrete objects, such as textbooks, problems, but including the products and procedures such as models or learning strategies. The media through of e-comic elementary school students are expected to be able to understand what it is with good character education, not bored and pleasant.

According the type of research has been stated previously, the presence of researchers in the field was indispensable. For this reason, researchers used a qualitative approach. This is due to the presence of researchers in the field as main instrument for data collection, planners, implementers, the giver of action, a data analyzer, the reporting of results and accountable in whole process and results.

3.2 Subject and Place of Research

The subjects were elementary school students in the city of Semarang, which were represented elementary schools by 01 and 02 central Pedurungan.

3.3 Methodology Development

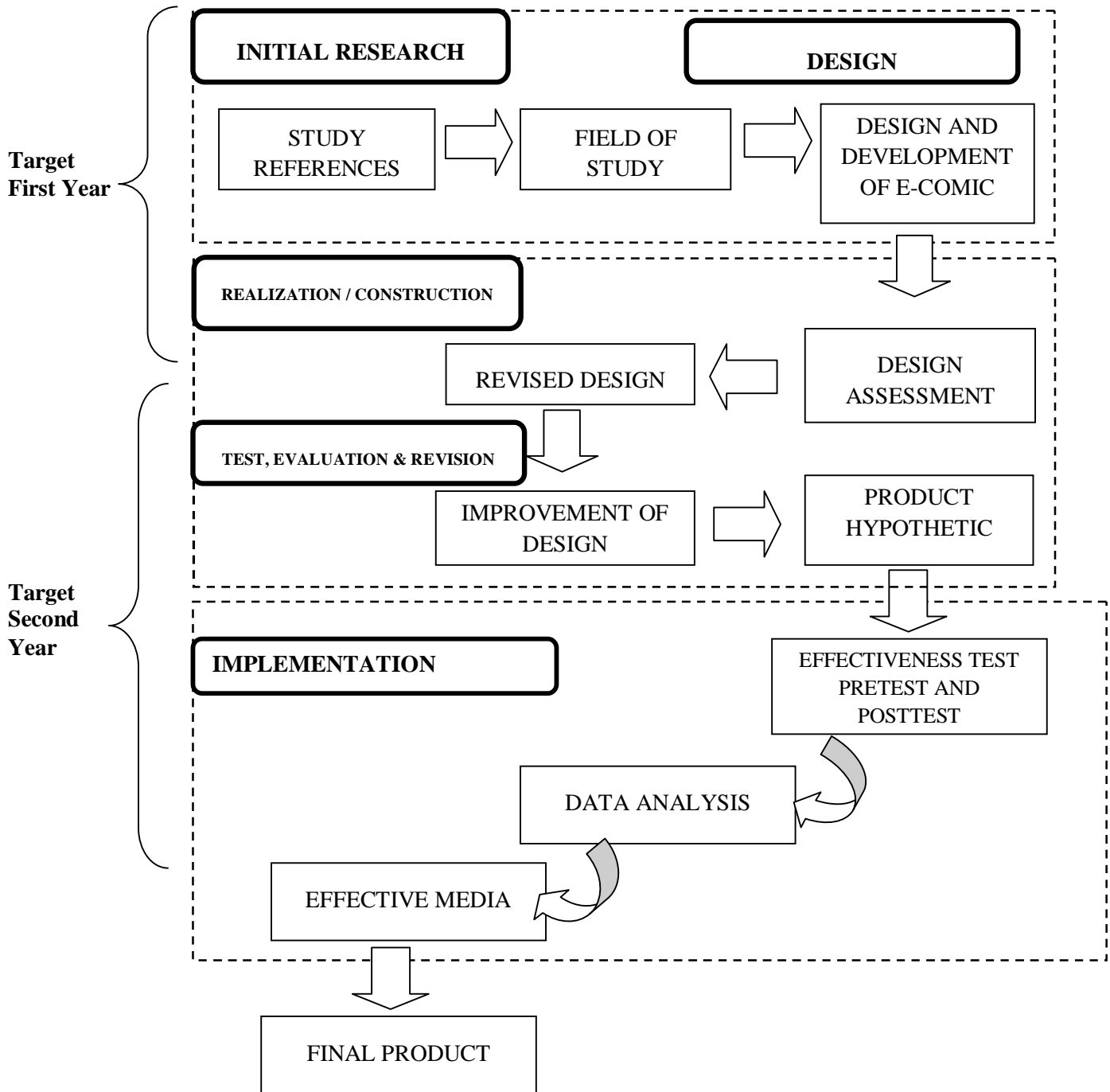


Figure 4.1 Modified Borg and Gall Development Design and Plomp

Based on the above procedure, the researchers designed a study stages as follows:

1). Initial Research

The initial research conducted by researchers visited in elementary school of 01 and 02 were located at the Majapahit Pedurungan Semarang. The initial research activities conducted to determine how elementary school students understanding of character education and how to apply it. The data was captured by researchers first must develop tests priority knowledge about character education, and how to apply it. Based on this understanding, then the researchers developed a model education and e-comic character who can help elementary school students to understand how you can combat the negative character in daily life.

2). Design

Researchers collaborate with one of elementary teacher, one of students elementary, one cartoonist and one of child psychologists to design a media and educational character. Researchers itself consists of one chairman educational background and applied mathematics clump media, educational background members of media clump mathematics and geometry, then a member of another educational background in mathematics education clumps. Things that were designed include:

- a. The things that need to be present in e-comic and their character education.
- b. The idea of mathematical material in accordance with the e-comic includes background and what is discussed in the media.
- c. Applications software FlipBookmaker creation of e-comic.
- d. The use of e-comic scenario in the classroom

3). Realization / Construction

Based on has been designed in phases / stages before. Researchers also together with one elementary of teacher, one elementary of students, one cartoonist and one of child psychologists develop and implement e-comic character education in question. Results of development is called PROTOTYPE 1.

4). Test, evaluation and revision

The prototype was validated by 2 validator, that was one professional of material by Prof. Dr. Sunandar, M.Pd. lecturer of Mathematics Education University PGRI Semarang, and one professional of media by Murti Dewanto Febrian, M.Kom lecturer of tehnic Informatics University PGRI Semarang. Based on the results of this validation, the researchers improve education based e-comic characters have been developed previously.

Results of these improvements is called PROTOTYPE 2. Prototype 2 is then validated again by the same two people validator to obtain e-comic as well as models that can be implemented at a later stage. Results of the validation is called PROTOTYPE 3. Then prototype 3 done improvements way of implementing the elementary school students in the next stage

5). implementation

Then the prototype 3 was implemented to elementary school students to obtain input from improvement of teacher education based e-comic characters. The implementation results were examined whether it meets three criteria have been determined. If not meet all three criteria have been determined. If not meet, researchers improve prototype 3 into prototype 4. based on three criteria checked again, repair, and so on to obtain e-comik character education that meets the criteria of a valid, effective and practical.

4. Result and Discussion

In development research has been adapted the design development by Plomp (1997), which consists of five phases: (1) initial research (phase of preliminary investigation), (2) design (phase of design), (3) realization / construction (phase of realization / construction), (4) test, evaluation and revision, (phase of test, evaluation and revision) and (5) implementation (phase of implementation), which is described as follows:

4.1 The Initial Research

The study was conducted literature has made various efforts to increase the study of theory related to depth material that will be made form of e-comic, books of literature used from a variety of sources such as a book teacher and student books in the curriculum in 2013 for elementary school children Grades 6, math book erlangga grade 6 math books, Yudhisthira grade 6 books on character education, books on computers and articles on the internet that point was produce a model learned character with an e-comic that in terms of content material of mathematics, media content and character integrated with each other both online and offline.

Field was studied selected 2 (two) favorite school in the city of Semarang, namely elementary school of 01 Pedurungan Central and 02 Pedurungan Central Semarang, from visits to the school gained a lot of info as follows: (1) lack of instructional model character education aided by the media, both online and offline, (2) the absence of math book that includes 18 national character firmly in any math book, (3) the absence of teachers who are

able to make the application of e-comic math online and offline. Problems of the teachers and students at elementary school of 01 and 02 Pedurungan Central Semarang very enthusiastic when learning model based e-comic character to be developed can be used at the school.

4.2 Design

The researchers was designed phase developed a draft for e-comic Mathematics elementary school based character education. The steps to create an e-comic were follows:

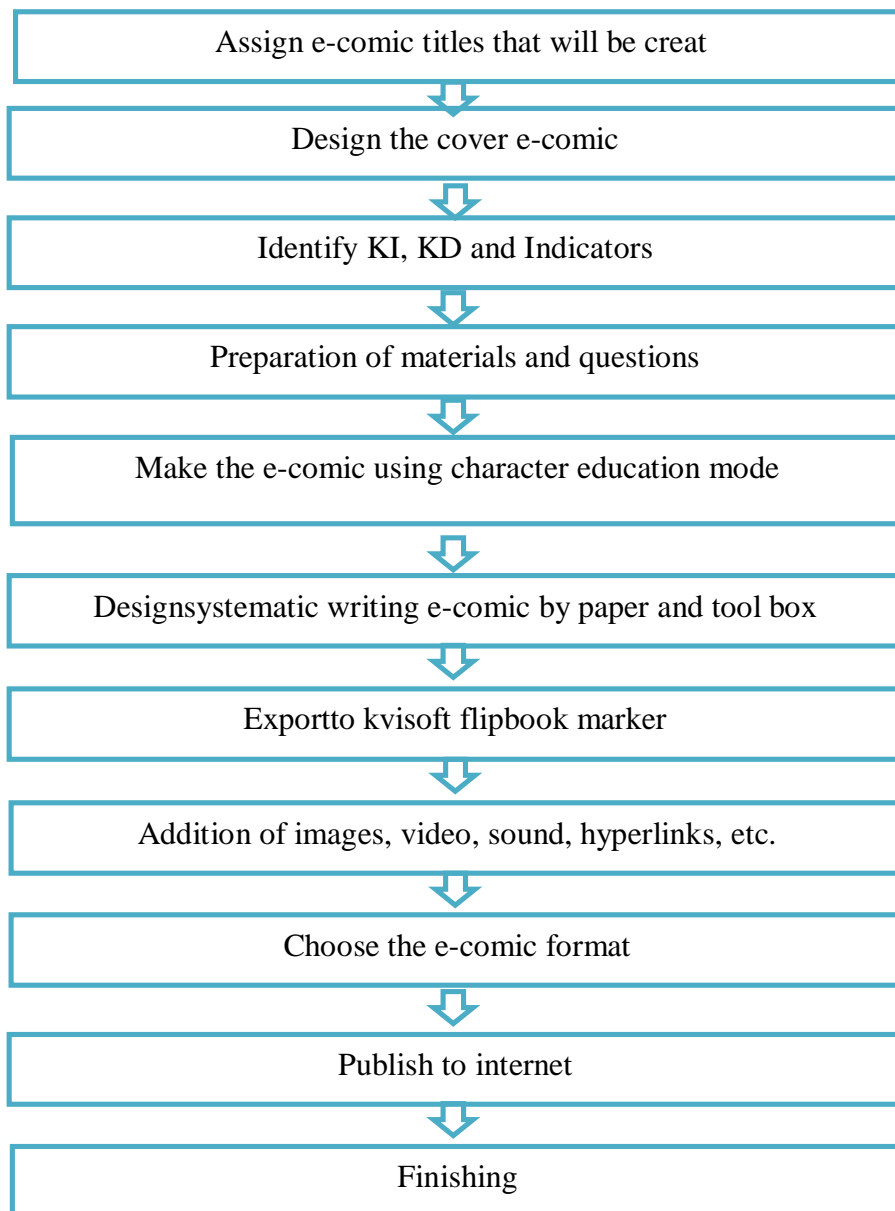


Figure 5.1. the steps to create an e-comic

The e-comic detailed steps as follows:

- 1) The 6th grade mathematics looking at syllabus corresponding curriculum in 2013.
- 2) Determine KI, KD and appropriate indicators.
- 3) Choose the material odd semester math grade 6.
- 4) Select the model of Problem Based Learning (PBL), the model Project Based Learning (PJBL) or Discovery Learning in the delivery of material.
- 5) Determine the value of the character that will be achieved in materials tailored to educational character of the nation's 18.
- 6) Develop the material with paper and tool box fitted with contextual questions with images appropriate to the material.
- 7) Save the file in the form of tau JPG PNG.
- 8) Converting PNG or JPG file in PDF format.
- 9) Select the appropriate instrumental music level of development of elementary school children.
- 10) Incorporate math material in the form of PDF to FlipBookMaker.
- 11) Insert the appropriate instrumental music students from elementary level thinking.
- 12) Create a hyperlink in a table of contents.
- 13) publish in the form of SWF.
- 14) Create a blog under the name ecomicmatsd.blogspot.com
- 15) Embeds the SWF file into the blog.
- 16) Can be opened online material like display open book.
- 17) Print color material in the form of a PDF file with paper CTS 150 in order to look good and strong.

Design was stage by the researchers draft aided design model of education e-comic character with PBL and Modification Design based Kohlberg Moral Theory e-comic as follows:

Table 1. Development Design of Character Education Learning in Elementary School

| Kohlberg's Theory of Moral Development (1977) was based on the theory of Cognitive Dewey and Piaget | Design PBL (Problem Based Learning) | Modification Design PBL and Kohlberg Moral Theory based on e-comic |
|--|--|---|
| Stages "preconventional": Level 1: heteronomus morality: In this developmental level of morality deed was determined by the characteristics and effects of a physical nature. | Phase 1: Orient students to the problem Describe purpose of learning, necessary logistics, motivate students actively involved in problem solving chosenactivity. | Phase 1: Invites students to active learning based on good morality in any problem solving aided e-comic. |
| Level 2: individual morality and reciprocity: Someone began to realize the objectives and purposes of others. Someone trying to fulfill their own interests by observing also the interests of others. | Phase 2: Organize students learn to help students learn limiting and organizing tasks associated with the problems faced. | Phase 2: Able to adjust personal interests and others in dealing with mathematical problems well and consciously assisted e-comic. |
| Stages "conventional": Level 3: mutual expectations between individual morality. Criterion of good or bad an action in this level was determined by shared norms and a relationship of mutual trust. | Phase 3: Guide investigation encourage individuals and groups of students gather appropriate information, conduct experiments, and looking for an explanation and solution. | Phase 3: In the process of investigation was based on mutual trust between friends in gathering information on the implementation of the experimental and problem solving aided e-comic. |
| Level 4: morality social system and conscience:an actionwas considered good if it is | Phase 4: Develop and present work of helping students plan and prepare appropriate work | Phase 4: Able to develop and present the work of mathematics adapted to social system in |

| | | |
|--|--|---|
| <p>approved by the ruling and in accordance with regulations that ensure order in society.</p> | <p>such as reports, videos, and models, and helping them to share tasks with friends.</p> | <p>environment and able to share with his tasks.</p> |
| <p>Stages "posconventional":</p> <p>Level 5:</p> <p>transition level: Someone has not reached the level of "posconventional" truth. At this level the criteria of right or wrong were subjective and personal, and did not have a clear principle in making a moral decision. Level 5: morality of social welfare and human rights. Criteria for the morality of the act was something that can guarantee rights individuals as well as in accordance with the norms prevailing in a society.</p> <p>Level 6:</p> <p>morality was based on the principles of public morality: The size was right or wrong was determined by their own choices based on moral principles were logical, consistent, and universal.</p> | <p>Phase 5:</p> <p>Analyze and evaluate the problem solving process helps students reflect on the investigation and the processes used during troubleshooting.</p> | <p>Phase 5:</p> <p>Able to analyze and evaluate the process of mathematical problem solving adapted to the norms prevailing in society assisted e-comic.</p> <p>Phase 6:</p> <p>Able to reflect the results of investigation with the performance of mathematical problem solving based on the moral principle that is logical, consistent and universal aided e-comic.</p> |

4.3 Realization and Construction

In this phase, the results have been designed in the form learning model of education through e-comic character in the validation by professional. The selected professionals were professional as learning and professional as media. The professional learning would review the learning model has been developed was character education

learning model. The phase learning model of education through e-comic character is as follows:

Phase 1: Invite students to active learning based on good morality in any problem solving aided e-comic.

Phase 2: Ability to customize personal interests and others in dealing with mathematical problems well and consciously assisted e-comic.

Phase 3: In the process of investigation was based on mutual trust between friends in gathering information on the implementation of the experimental and problem solving aided e-comic.

Phase 4: Ability to develop and present the work of mathematics adapted to the social system in environment and able to share with his tasks.

Phase 5: Ability to analyze and evaluate the process of mathematical problem solving adapted to the norms prevailing in society assisted e-comic.

Phase 6: Be able to reflect on the results of investigation with the performance mathematical problem solving based on the moral principle that is logical, consistent and universal aided e-comic.

The professional as media validate e-comic has been combined with character education. This learning model was very attractive by elementary school children because of the media e-comic character education have been integrated, they can play and learn.

4.4 Test, Evaluation and Revision

After the validation by professional held revisions were applied in the learning process. In the learning process observation that was integrated with the characters, among others, the character of cooperation, appreciate opinions of others, active in learning, and self discipline. After learning some of meetings conducted tests to see increased student achievement.

4.5 Effectiveness Learning Model of Character Education Through E-Comic

From the results of implementation from class and test evaluation were already in action, the results was obtained in the experimental class average is 8.9 and 6.5 in the control class. This suggests that the learning model of education through e-comic character

can stimulate students motivation to learn and can improve student character education from an early age so that it will be successful for further education. In line with that given by (Pala 2011) the development of socialization skills and integration of character education were an important part of a child's academic success.

Implementation learning model of character education made observations on activity of students before and after executed process models. The result can be seen from the table below:

| Activity | Cooperation | The opinions value of others | Discipline | Independent |
|----------|-------------|------------------------------|------------|-------------|
| Before | 23% | 35% | 45% | 30% |
| After | 82% | 88% | 84% | 81% |

There was saw an increase value of a character before and after the model implemented. The learning model was succeeded in process of planting character formal education. Leo (2011) states the character of education that focuses on the students identity development to be smart and having students character needs to be forced through informal and formal education.

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