PRACTICALITY LEARNING SOCIAL SCIENCE USING TEACHING MATERIAL E-BOOK 3D PAGE FLIP FOR GRADE IV ELEMENTARY SCHOOL

[1]Alfiansyah, [2]Rusijono, [3]Waspodo Tjipto Subroto

[1]*Basic Educations Postgraduate of Universitas Negeri Surabaya*
alfiansyah995@gmail
[2]*Basic Educations Postgraduate of Universitas Negeri Surabaya*
rusijono@unesa.ac.id
[3]*Basic Educations Postgraduate of Universitas Negeri Surabaya*
waspodosubroto@unesa.ac.id

Abstract

This article aims to develop learning materials eBook 3D Page Flip as well as provides additional references to the use of learning materials to teachers and students. The learning process in the classroom using conventional materials causing the students are less active in the learning process. Elementary school age children are in the process of development of oprasional concrete as well as students need rendering are iconic. Research methods development research using model 4 d (Four D Model) with a design class (one group pretest-posttest). The sample in this research totalled 38 grade IV elementary school. The study did three times by measuring learning implementation learning and activities students are rated by two observer. The results of this research in the form of e-learning materials 3D Page Flip eBook exceptionally well used to grade IV elementary school students in the learning process.

Keywords: **Practicality, Teaching Material, E-book 3D Page Flip**

INTRODUCTION

Indonesian society's awareness of increased education (Badan Pusat Statistik, 2017). Awareness raising on education is supported by government curriculum development in 2013 (Permendikbud: 2013). The government is developing a thematic-themed curriculum by incorporating themes called the 2013 curriculum.

Educational development should be accompanied by teacher development in the learning process. The developed curriculum should not only be an external context but remain the same (Mangunwijaya, 95: 2013). This means that educators or teachers do conventional learning in the same way learning as before. The obligations of a seorangguru besides teaching the class that is developing teaching materials to actualize their competencies as professional teachers. The teacher's keratity to provide learning to students is very important. Creative teachers determine the level of intelligence and talent they have. Teacher creativity provides solutions to student learning problems. So the great goal of this country has a bright young generation in the 21st century materialized.

The 2013 curriculum suppresses 3 aspects that students have in an integrated manner, attitude, knowledge, and skills. This goal can not be separated from to create intelligent young generation in the 21st century terwujut. The expected genuineness of muada is to be able to respect the fundamental values. IPS subjects are very important because it

accommodates humans in learning all aspects of life. IPS subjects in elementary school learn about human, time, social system, culture, behavior, economy and prosperity (Suhanaju & Waspodo, 2013: 1).

Implementation of the field is still not in accordance with the expectations of the government. Students still find it difficult to associate learning with their environment. Primary school age is at the concrete operational stage (Siregar & Nara, 2011: 33). Teacher's duty to innovate to develop teaching materials so that no rivet on the 2013 curriculum book. According to Shoimin (2016: 19) innovation is a change that is interpreted with new things done to solve a problem. In line with Prastowo (2015: 19) the quality of learning is low when educators are only fixated on conventional teaching materials without any creativity to develop innovative learning.

Mining teaching materials is the activity of teachers synergize with the government to improve the quality of education. Learning strategy in the 2013 curriculum is studen center, students need teaching materials that can accommodate students' understanding. Development of teaching materials in the form of 3d pageflip e-book that suits the development of the teachings. In this modern era the use of electronic materials can be used as an option to educate the quality of education. The use of e-books that can be used through electronic devices is more practical to be used by students, without having to carry a printed book, it is expected that students do

not have to trouble if carrying a large number of books (Partiawardhani, 2015).

Preliminary observations conducted by researchers on the implementation of learning in Kemayoran I Elementary School obtained information media completeness to make a good teaching materials and in accordance with the challenges of time has been met. Computer electronic media, poyektor in class, and the use of e-learning is available in SD Negeri Kemayoran I to support the learning process, but for the completeness of teaching materials SD Negeri Kemayoran I only use textbook thematic curriculum 2013 and LKS on IPS subjects. Up to required teaching materials that will also support e-learning learning in SD Negeri Kemayoran 1. In addition, 76.3% of SD Kemayoran 1 students have laptops, smartphones or tablets brought to school. From the percentage of ownership of these devices the dominance of use for communication (41.3%), games (93.1%), internet (82.7%), and learning (65.5%). The observational data shows that the use of electronic devices has not been optimized in learning. This is due to the limited developers of instructional materials in the form of electronics.

Teaching materials are everything that can help in the learning process in the form of writing or not (Prastowo, 2013: 297). Teaching materials are all aspects of the material used in education to support specific learning (Lewis, 2016). teaching materials are born from a learning plan created by the teacher (Lestari, 2013: 1).

The form of materials is divided into printed materials and non-printed teaching materials. Printed teaching materials include: modules, handouts, student worksheets, (LKS), and textbooks. Non-print teaching materials include: audio teaching materials, audio visual teaching materials, interactive teaching materials. (Mulyasa, 2006: 65). Mining teaching materials aims to provide learning that dance and in accordance with the development of students so that the impact on kemandirin students and the capacity of competence is mastered (Prastowo, 2015: 27). With the availability of various teaching materials, the students will get the benefits, namely learning activities become more interesting. Students will have more opportunities to learn independently and reduce dependence on teachers (Ahmad & Amri, 2014: 159).

E-books or digital textbooks are breakthroughs of future-oriented textbooks to help students learn independently anytime and anywhere with high mobility (Jang, 2014: 75). According to Kemendikbud (2013, p.55) e-book is a digital publication consisting of text, images, video or audio that can be used through computers or other electronic devices. Simply put Zadravec, Buzina, & Seiter-Sverko. (2014) says simply e-books are merely book representations of electronic files on digital screens. In line with the opinions of Vassiliou M. and Rowley J. (2008: 355) the e-book must have a definition of the electronic or digital nature of the book as well as the content of the content or material in the digital book. It can be concluded that an e-book is a digital book consisting of text, images, graphics, audio and video used to help teachers and students learn either in the classroom or independently by using electronic devices or software that supports to view or read from behind the scenes .

The advantages of e-books from ordinary textbooks are easy to obtain by downloading, costing less because without printing, easier storage, can search for words or phrases with a touch of the screen, and there are features that link to the website (Waller, 2013). E-books are more efficient in terms of function and search of each title (Obst, 2009: 5). The developer has control as a publisher, distributor, full of the book (Cepulkauskaite, 2000: 3-5) (Selinda, Hoffman & Dawson, 2010: 523). In addition, e-books easily allow e-books to be accessed 24 hours, searching for keywords or phases quickly, cheaper rates, requiring no space and weight of books when taken or used, as well as a good impact on the environment because without using paper (Doering dkk 2012.).

With the development of the electronic book age has several types. According to Cepulkauskaite (2000: 6) there are several types of e-books are well known for its advantages and disadvantages such as: email, HTML, PDF, and electronic book reader. Embong et al. (2012: 2638) mentions the type of e-book text file biassa (.txt), microsoft word (.doc or .docx), adobe acrobat (.pdf), adobe flash (.swf) and e-book HTML on web pages .html).

The development of a product needs the criteria of validity, kepratisan, and effectiveness (Akker, 1999: 127). The validity of teaching materials developed in accordance with the assessment by the Badan Standar Nilai Pendidikan (BSNP, 2007: 21). Practicality of teaching materials is the development of teaching materials can be used well by teachers and students and support learning. Good e-book resource is easy for users, mobility, compatible with many electronic devices or operating systems (Bliss, 2013: 36). The e-book developed in this research is in the form of 3D Pageflip e-book. The application is an application to create digital book-shaped instructional materials with 3D effects setda can include music, video, pictures, buttons and animation (3dpageflip.com, 2017).

Social science is a field of study that analyzes various aspects (Sadjiyo, 2011: 1.26). IPS learning essence provides a social concept to form students into good citizens (Susanto, 2014: 6). It is expected that students have the character, social and culture that is in accordance with the basic philosophy of the state, namely Pancasila. Social science at the elementary school level is integrated from the type of social sciences that is geography and history (Wahab, 2009: 1.9), (Trianto, 2010: 171). The purpose of IPS learning is to have good interaction with the community, utilizing the surrounding and spreading the science around society (Sadjiyo, 2011: 1.29).

The developed product contains IPS material on the theme of "Beautifulness of the diversity of my Negative" theme as a companion of teacher book and student book of curriculum 2013. The translation of the material in the 2013 student curriculum book is more concretized so that the students can more easily understand in learning the material. Thus the researchers want to develop teaching materials to accommodate student activities well so that it affects the cognitive abilities of students.

Angela & Rudy (2017) *Development of E-book Using Kvisoft Flipbook Maker to Train Science Process Skill for Senior High School Students In Curriculum 2013*. In the study, researchers created a flip book-based electronic book using Kvisoft Flipbook Maker application to train process skills on science lessons.

Yueh-Min dkk. (2012) *Empowering personalized learning with an interactivee-book learning system for elementary school students*. With interactive book learning system for elementary students). In the study, researchers compared the use of printed books and electronic books to the accuracy of reading students. Researchers explain the use of digital books can provide a better experience.

RESEARCH METHOD

This research develops 3D Page Flip e-book material for grade VI students at IPS lesson. This research method is a development research that is used to produce certain products and test the effectiveness of developed products (Sugiyono, 2016: 297). The development of the teaching materials using Four D Model (4-D) research model with four stages are: (1) define, (2) design, (3) development, and (4) disseminate) (Thiagarajan, Semmel, & Semmel, 1974: 5). In the implementation, the researchers only use three stages, namely define, design, and development, so that the developed material is only used in the school in the trial without being disseminated to other schools. Researchers only provide resource options that can be used in primary schools.

In the defining stages are divided into: (1) early-to-end analyzes are performed to observe the school and conduct an analysis on the 2013 curriculum student's book. The final stage of this analysis determines the expectations and alternatives of problem solving that is the determination of the materials developed on the teaching materials. of the dish used as a reference for the development of 3d page flip book e-book materials. (2) student analysis is a product adjustment study developed with the characteristics of students. Sample of research researched fourth grade elementary school students aged between 9-10 years. (3) Task analysis is a collection of procedures to determine the content of the lesson, outlining the tasks undertaken by students in the learning process. (4) concept analysis identifies the material to be developed by incorporating other relevant concepts. (5) Formulation of learning objectives or indicators of achievement of learning outcomes on the KI and KD listed in the curriculum.

Design stage to create prototype (Thiagarajan, Semmel & Semmel 1974: 7). There are four steps in the design: Criterion Test Construction (Criterion Test Construction), media selection (selection), selection of teaching material formats (format selection), making the design of initial materials (initial design). Important activities in the design process are the selection of media used and the format for materials and initial design.

The purpose of the development stage is to produce a revised teaching material based on input from experts. The purpose of stage is to modify the prototype instructional material (Thiagarajan, Semmel & Semmel 1974: 8). Stages in the development stage namely: expert assessment (expert appraisal).

The study design in the testing phase is design to form one group pretest posttest (Sugiyono, 2016, p. 323). This research design begins with pretest to know the students' initial ability, then given treatment (treatment) in a certain period then do posttest to compare ability of student have got tretment and which do not get tretment.
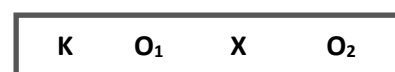
$$\boxed{K \qquad O_1 \qquad X \qquad O_2}$$

Figure 1. *one group pretest-postest*

The research was conducted at the grade of IV-A Elementary School Kemayoran 1 Bangkalan academic year 2017/2018 the number of students 38. The variables measured in this study is the practicality of teaching materials in the form of adherence to

learning and student activity using observation data collection and student response during learning using pengempulan questionnaire data. In accordance with the opinion of Akker, (1999, p.124) practicality is a teaching material that is used can be done well in the classroom and is considered good by teachers and students.

Technique of data analysis in research through observation to ekslasanaan done at every meeting. These observations include an assessment of the implementation of the lesson plan on preliminary activities, core activities and closing activities. the student's response is measured by a questionnaire about the student's response to the developed teaching material. The average assessment by the observer and the student response questionnaire is then determined by using the following formula:

$$P = \frac{\sum R}{\sum N} \times 100\%$$

Information:

P = percentage of implementation

$\sum R$ = number of scores obtained

$\sum N$ = maximum number of scores

Based on the formula, the results obtained in the form of percentage in table 1 with indicators of the implementation of RPP and student activity as follows.

Table 1 Criteria for the Implementation of 3D Page Flip Learning Material and activities

Kriteria Keterlaksanaan	Presentase
0% – 24%	Tidak terlaksana
25% – 49%	Kurang terlaksana
50% – 74%	Terlaksana baik
75% – 100%	Terlaksana sangat baik

RESULT AND DISCUSSION

This research was conducted in class IV-A SD Negeri Kemayoran 1 semester even. The descriptions of this study use 4-D one type of research development. The development process begins with the defining phase. In this stage, SD Negeri Kemayoran 1 has been known to use the 2013 curriculum since the first time the curriculum is implemented. SD Negeri Kemayoran one is the only primary reference school (SDR) in Madura. Fitasitas in school is very complete, a lot of media that can be used by teachers and students. One of them is the implementation of e-learning in conducting evaluation in the form of repetition or tryout ¬ for class VI students. With the e-learning students already have the ability menggnukaan electronic devices.

Students SDN Kemayoran I allows students to bring mobile phones to facilitate students when coming home from school to be picked up by their parents. However, mobile phones are allowed to be used when the learning process when students are given the task by teachers looking for more information on the internet. In addition, the use of mobile phones in schools tersenit not allowed. SD Negeri Kemayoran 1 students carrying cellphone reach 84.2%. In each class is provided printer, projektor, and seprangkat sound system to make students as the learning process takes place.

According to the theory of child development by Piaget, children aged 7/8 years to 12/14 years are at concrete operational stage. Children of this age need observation of real objects or concrete examples in solving a problem (Siregar and Nara, 2011: 33). In accordance with the age of grade IV-A SD Negeri Kemayoran 1 students aged 9-10 years, in the process of studying a material independently requires a real example taua representation of form to understand the material. So the development of a 3d page flip e-book teaching material that features image, audio, and video can translate abstract material is very appropriate for grade 4 elementary school students.

The development of 3d Page Flip teaching materials is very appropriate for students in grade IV of elementary school because students can access the e-book anywhere. In addition the teaching materials are also practically used during the learning process by both teachers and students. These materials are based on the implementation of the learning implementation plan using the teaching materials. Then with the activities of students during the learning and questionnaire students as a response to the use of teaching materials during the learning process. Diagram 1 dan table 1 contains instructional data as follows.
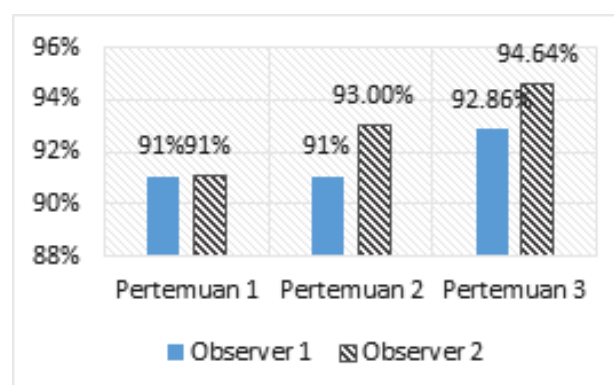

Diagram 1. implementation of learning

Table 2. instructional learning

Encounter	Observer 1	Observer 2	Rata-rata
Encounter 1	3,64	3,64	3,64
Encounter 2	3,64	3,79	3,71
Encounter 3	3,79	3,86	3,82
Keterlaksanaan			3,73

Based on Diagram 1 it can be known to access the results of observer 1 and observer 2 on IV-A keynote pursuit from the 1st meeting until the 3rd meeting shows the figure above 90%. At the first meeting of observer 1 and observer 2 Gives an average amount of 3.64 or with a percentage of 91%. At the 2nd meeting there was an increase in the value of observer 2 with a rat-average value of 3.71 with a percentage of 93%. At the 3rd meeting the observer 1 yielded an average of 3.79 with the percentage of 92.68% while the two observers issued an average of 3.86 with percentage of 94.64%. Although it can be categorized the level of implementation of learning in class VI-A performed very well with the value of the implementation of 3.73 or 93.25%.

In the learning process there must be obstacles that arise, namely the first meeting students still feel awkward in using 3-d e-book page flip. Students are not used to doing learning activities with these teaching materials. The transition from printed book to e-book requires adaptation to students. Will tetepi for the use of electronic tools to students is not problematic because previously students are accustomed to using mobile phones. The researcher should provide repeated explanations for using 3-d flip e-book material. The next meeting students begin to understand the teaching of teaching materials so that they can follow the researcher can do the learning in accordance with the lesson plan. Overall the level of observation assessed by the observer is very good.

In addition to the implementation of learning to menguku keprektisan teaching materials are also worsened through student activity during the learning. Assessment of student activity during the learning is assessed by observer 1 and observer 2 at each meeting. The result of the observation of 3-d page flip book e-book learning activity can be seen in diagram 2 and table 3 below.
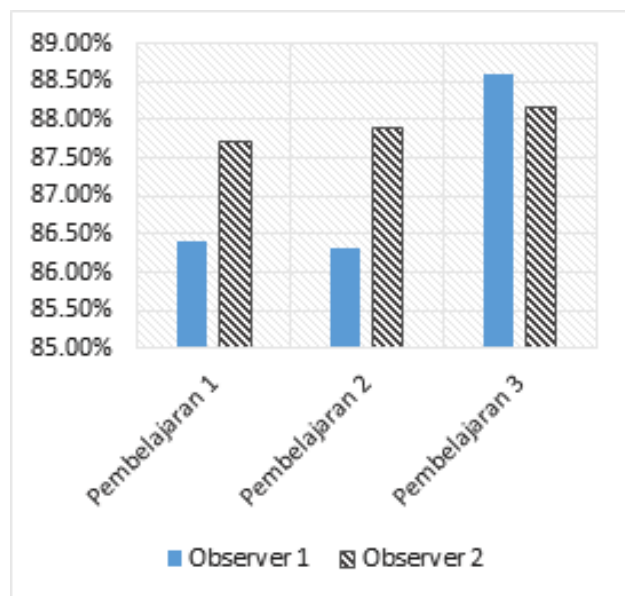

Diagram 2. student activity

Table 3 student activity

Encounter	Observer 1	Observer 2	Rata-rata
Encounter 1	86,40%	87,72%	87,06%
Encounter 2	86,32%	87,89%	87,11%
Encounter 3	88,60%	88,16%	88,38%
Student activity			87,83%

Along with observation of the implementation of learning each observer also mengkur student activity during the learning process. Based on diagram 2 and table 3 of student activity in following learning by using 3d page flip book e-book material can be very good. At first meeting observer 1 give student activity appraisal 86,40% and observer 2 meberikan percentage of 87.73% penilaan. The second meeting of observer 1 gives the percentage of appraisal 86.32% and observer 2 gives the percentage of appraisal 87.89%. The third meeting of boserver 1 gives the percentage of assessment 88.60% and observer 2 gives the percentage of appraisal 88.16%. So the percentage of students activity follow the learning process at the first meeting 87.06%, the second meeting reached 87.11%, and the third meeting reached 88.38%. There was an increase from the first meeting until the third meeting of 1.77%. Qualify the percentage of students' activities during the learning process using the 3d page fold of the 3d fold e-book as a whole reaching 87.83% by averaging the first meeting, the second meeting, and the third meeting. Thus the student activity during the learning process can follow very well because the percentage> 75% so it can be said very good.

CONCLUSION AND SUGGESTION

Based on the above data exposure can be concluded that the implementation of learning using teaching materials 3d page book e-fold through teacher activity to provide learning to students is very good because the percentage of teacher activity for three meetings reached 93.25%. And the student activity during learningmengguanakn teaching materials 3d page e-book fold, student activity shows the percentage of 87.83% which can be categorized very well. Thus the use of teaching e-book 3d page flip can be said practically used in the learning process because the percentage> 50%.

It is expected that teachers can become facilitators and guide and involve students maximally in the learning process. The form can be involved by doing group activities. In addition, the use of teaching materials for students is expected due to visit the learning process of students. Application of 3-page flip book e-book material is one of the teaching materials that can accommodate the students in the learning process because according to the level of development of elementary school age children.

REFERENCES

3D PageFlip. (2012). *3D Page Flip Standar "Build Cool 3D page-flip eBook with PDF".* 3DpageFlip.com.

Ahmadi, Iif Khoiru & Amri, Sofan. (2014). *Pengembangan Dan Model Pembelajaran Tematik Intergratif.* Jakarta: PT. Prestasi Pustakaraya

Akker, Jan van den. (1999) *Design Approaches and Tools in Education and Training.* Springer Science+Business Media Dordrecht. (DOI 10.1007/978-94-011-4255-7)

Badan Pusat Statistik. 2017. *Angka Partisipasi Sekolah (APS) menurut Provinsi, 2011-2016,* (Online), (https://www.bps.go.id, diakses 29 Agustus 2017).

BSNP. (2007). *Buletin BSNP "Kegiatan Penilaian Buku Teks Pelajaran Pendidikan Dasar dan Menengah".* Vol. II/No.1/Januari 2007. Jakarta: Badan Standar Nasional Pendidikan.

Bliss, TJ, (2013). *A Model of Digital Textbook Quality from the Perspective of College Students.* All Theses and Dissertations. 3424. http://scholarsarchive.byu.edu/etd/3424

E. Mulyasa. (2006). *Menjadi Guru Profesional Menciptakan Pembelajaran Kreatif dan Menyenangkan.* Bandung: Remaja Rosdakarya Offset

Embong, A.M., Noor, A.M., Ali, R.M.M., Bakar, Z.A., and Amin, A.M. (2012). *Teachers' Perceptions on the Use of E-Books as Textbooks in the Classroom.* http://waset.org/publications/11787/teachers-perceptions-on-the-use-of-e-books-as-textbooks-in-the-classroom (diakses, 28 Oktober 2017).

Huang, Y.M., Liang, T.H., Su, Y,N, & Chen, N.S. (2012). *Empowering Personalized Learning With An Interactive E-Book Learning System For Elementary School Students: Association for Educational Communications and Technology,* 60:703–722. Doi: 10.1007/s11423-012-9237-6.

Kemendikbud. (2013). *Simulasi Digital Jilid 2.* Malang: Kementerian Pendidikan dan Kebudayaan

Lestari, Ika. 2013. *Pengambangan Bahan ajar Berbasis Kompetensi Sesuai Dengan Kurikulum Tingkat Satuan Pendidikan.* Padang: Akademia Permata.

Mangunwijaya, F. (2013). Menyambut Kurikulum 2013. Jakarta: Buku Kompas.

Patriawardhani, D. (2015, Juni 24). *Penerapan E-Book Sebagai Sarana Alternatif dalam Proses Pembelajaran Mahasiswa di Indonesia.* [artikel web] https://www.kompasiana.com/dykapatria/penerapan-e-book-sebagai-sarana-alternatif-dalam-proses-pembelajaran-mahasiswa-di-indonesia_55188436813311a6669defd2

Prastowo, Andi. (2013). *Pengembangan Bahan Ajar Tematik.* Jokjakarta: Diva Press

Prastowo, Andi. (2015). *Panduan Kreatif Membuat Bahan Ajar.* Jokjakarta: Diva Press.

Sadjiyo., Sugandi, Didih., Ischak. (2011). *Pendidikan IPS di SD.* Penerbit Universitas Terbuka

Shoimin, Aris. (2016). *68 Model Pembelajaran Inovatif dalam Kurikulum 2013.* Yokyakarta: Ar-Ruzz Media

Suhanadji., & Waspodo, T. S. (2003). *Pendidikan IPS.* Surabaya: Insan Cendekia.

Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* Bandung: Alfabeta.

Susanto, Ahmad. (2014). *Pengembangan Pembelajaran IPS di Sekolah Dasar.* Jakarta: Prenadamedia Group.

Thiagarajan, Sivasailam., Semmel, Dorothy.S., dan Semmel, Melvyn.I. (1974). *Instructional Development for Training Teachers of Exceptional Children: A Sourcebook.* Mineapolis, Minnesota: Leadership Traning Insttude/Special Education, University of Minnesota.

Vassiliou M. dan Rowley J. (2008). *Progressing the definition of "e-book"*. Mancester, UK. at www.emeraldinsight.com/0737-8831.htm (diakses 26 Oktober 2017)

Wahab, Abdul Aziz. (2009). *Konsep Dasar IPS*. Penerbit Universitas Terbuka

Waller, Darlene. (2013). *Current Advantages and Disadvantages of Using E-Textbooks in Texas Higher Education*. http://www.nationalforum. com/ (diakses, 26 Oktober 2017)

Zadravec, Sofija Klarin. Buzina, Tanja. & Seiter-Sverko, Dunja. (2014). *This work is made available under the terms of the Creative Commons Attribution*. http:// creativecommons.org/licenses/by/3.0/ (diakses 25 Oktober 2017)