

Environmental Care Imaging: Basic School Students through Character Education by Information Communication Technology (ICT) Based Learning

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The character education in early childhood emotionally and psychologically more receptive touch information through the development of ethical values from early age. The purpose of this research is to analyse correlation of environmental care imaging, basic school students, character education and also to know the student learning outcomes through the implementation of ICT based learning in the subjects of environmental care imaging to determine students' responses to environmental awareness through character education, The method used is quantitative research. The follow up data analysis used is multiple regression, survey and observation of elementary school teachers who watched the development of their students' character as to concern about the environment. The results showed that the independent variables consisting of environmental care imaging (X1) and basic school students (X2) had a negative effect and only character education (X3) had a positive effect towards the dependent variable namely based learning (Y) with the regression equation $Y = 29.760 - 10.011X1 - 11.812X2 - 0.512X3 + 0.366X4 + e$ and sig value $X1= 0.040$, $X2= 0.103$, $X3= 0.088$ and $X4= 0.750$. Next, the

results of implementation of ICT-based learning in the subjects of character education showed an increase in average student learning outcomes in each cycle. Average student learning outcomes before the action amounted to 68.81. Afterwards outcomes increased to 88.70 and 88.00. The conclusion care attitudes introduced early on will provide a positive response in an effort to improve environmentally caring images in the generations to come.

Key words: *Education, Environmental Care, Character*

Introduction

Character education is intended to change character for the better. Character education has a higher meaning than moral education, because character education is not only related to the problem of right versus wrong, but how to instill habits about good things in life. The students' will then have a high awareness, understanding, care and commitment to apply virtue in their daily lives. Character education is not new. Every educational effort itself is actually to build character.

Lusy et al. (2017) stated that character education contains three basic elements: a. knowing the good (knowing good), b. desiring the good (loving kindness), and c. doing the good (doing good). Character refers to a series of thoughts (cognitive), feelings (affective), and behaviours that have become habits (Zuchdi, 2012).

The problem is: Why is community concern for the environment so far still lacking? Environmental care cannot be obtained instantly. But it takes a long time to form. People will care for the environment because of direction, habituation and exercises that take place routinely for a long time. For this reason, from the time that people are children they must endeavour to have good habits; among them habits of caring for the environment. Habituations which take place continuously will be firmly planted under the sub-conscious, and one day these will be expressed in daily life (habits), and will become someone's character. For this reason, environmental care imaging needs to be introduced early, both through mentoring and formal education at school and informally at home by parents (Lusy et al., 2018).

In this study the concept of imaging character education is an effort to revive certain processes, methods, or actions, by reinforcing the practice of education in general, and especially what happens in elementary schools, to make students have good character. That character is typified by one of its specifications; the emergence of student awareness of caring for friends, as well as concern for better environmental change. This main study: 1)

finds out the condition of the learning process of the environmental education in children of elementary school students; 2) finds learning models that can improve the imaging of environmental education, to improve the competence of elementary school students.

Research methods

Quantitative research was used. The dependent variable is Character Education (Y) and the independent variable (X) consists of the following: Environmental Care Imaging (X1) and Basic School Students (X2). The nature of each operational definition dependent variable is described below.

The variable Environmental Care Imaging (X 1) is an independent variable. It is categorized as size or non-parametric scale, and measured using a dummy variable by giving a value of 0 and 1. However, the researchers looked not just at schools, but also at other Indonesian institutions, such as the Indonesian Stock Exchange (IDX) and also underwriters. Character education in the top 10 in 50 IDX monthly active brokerage houses based on the total trading frequency is rated 1, and underwriters who do not enter the top 10 are given a value of 0. Basic School Students Variable (X 2) is an independent variable of category size or non-parametric scale. It is measured using a dummy variable by giving a value of 0 and 1.

The Big Four auditors are PwC, Deloitte, Ernst & Young, and KPMG. Companies that use Big Four auditors are given a scale of 1. Companies that do not use auditors in the Big Four are given a scale of 0. Character education (Y) is that positive difference. Analysis of the data used to test the hypothesis is multiple linear regression, to test and analyse both partially and simultaneously, to determine the effect of underwriter reputation, auditor reputation, profitability and the degree to which the company engages in underpricing.

Two months of research followed. The use of information and communication technology (ICT) models, to improve learning outcomes in the Investment Management and Portfolio, took place at the Basic School. The Basic School is highly responsive to innovative development efforts, and is open to progress, has a vision towards progress, and is willing to cooperate with researchers.

A Participatory Observation method was used, with interviews, dialogue and a literature review. The study was conducted on 30 teachers in five elementary schools in East Java. The research team carried out the Observation at meetings with determined elementary school teachers. Data was collected from schools. It included types of academic and non-academic activities related to the introduction of character education in schools. Thirty parents of students in five elementary schools were interviewed to collect data, during report card retrieval sessions. Some questions related to the types of activities, methods and involvement

of people at home, in introducing and instilling the importance of environmental care character education in their children from an early age.

Result and Discussion

The research related to the objective conditions of environmental education as implemented in elementary schools today. It shows that, in general, all teachers are familiar with Environmental Education and view Environmental Education as forming a child who has a personal, environmental concern. Teacher also think it very important that environmental education is given to elementary school students, but the model used at this time is still not optimal. There are still many elementary school students who have poor behaviour. There are still many students who have egotistical characteristics and a lack of social care. Concern for the environment even begins to fade. There are still students who behave impolitely, littering, lack hygiene, and the class is not clean and not neat.

Character education applied in schools is not taught in special subjects, but implemented through daily learning in school. Fasli (2010) said that government-driven character education to be carried out in schools would not burden teachers and students. The values contained in character education actually already exist in the curriculum, but so far they have not been put forward and taught explicitly. Values are delivered to the teachers so that they are contained in subjects, as well as in extra-curricular activities, and thus are conveyed clearly to students. Character education can also be integrated into school culture and developed. This is one kind of education that can build national insight and environmental insight, so the character education that will be implemented nationally does not burden the current curriculum. Besides that, the values that need to be built in the nation's future national generation are honesty, hard work, respect for differences, cooperation, tolerance and discipline. Schools are free to choose and apply the values that students want to build.

The results of research relate to curriculum development tools. In general teachers have a reference in developing learning tools. In 2018 all elementary schools are expected to have implemented a new curriculum, namely the 2013 curriculum. This curriculum has been developed based on competency. In it are integrated, formulated competencies of attitudes, knowledge, and skills that students must master. In addition, the learning process and assessment that students need to achieve the desired competencies are also formulated. One important work was the "Prepared Integrated Thematic Books 2013 curriculum prepared starting for Grade 1 students - Grade 6 elementary school students; written in reference to the 2013 curriculum". It was designed using an appropriate learning process to achieve competence (Kemendiknas, 2017).



A second important work was “Implementation, 2013 Curriculum. The Student Book” (BS). It was compiled and reviewed by various parties under the coordination of the Ministry of Education and Culture. It was used in the initial stages of implementing the 2013 Curriculum. The book is a “living document” that is constantly improved, and updated according to the dynamics of needs and changing times. Feedback from various circles is expected to improve its quality. The book is a student guide as well as an activity book that will facilitate active student involvement in learning. It is supplemented with a more detailed explanation of its contents and usage, written in the teacher's edition (Lusy et al., 2018).

A classical style is the one most often chosen for class organization. The most frequently chosen method is question and answer, conversing and assignment. The most commonly used source of learning is the surrounding environment, as well as story books, series drawings and manipulative game tools. Teachers generally report the development of students as much as once each semester, orally and in writing. In Developing Active Student Learning Methods 2013 Curriculum Has Been Equipped with Teacher Books (BG) and Student Books (BS). The book has been prepared for the Active Students program that also pays attention to the surrounding environment, the community and parents at home. (Kemendiknas, 2017; Ettu, et al., 2016).

Research results also show that in general teachers are ready to accept new innovations related to the Environmental Education learning model for their students: Normality test: Using the Kolmogorov-Smirnov method with a significance level of 0.05, normality testing obtained a significance value of 0.145. Because $\text{sig} > \alpha$ (0.05), then H_0 is accepted. It means the residual regression is normally distributed.

Multicollinearity Test: The independent variable consists of underwriter reputation, auditor reputation, profitability and company size. The VIF number is less than 5, while the tolerance value is close to 1. Thus it can be concluded that in the regression model there is no problem with multicollinearity.

Heteroscedasticity Test: The plot of Z_{pred} with S_{Resid} above can be seen that the standardized residual (variance) spreads. It can be concluded not occur heteroscedasticity in regression residual value (standardized Residual).

Autocorrelation Test

The DW value is 1.848. From the DW Table with a significance of 0.05, and the number of observations (n) = 88, k = 4 (k is the number of independent variables), the dL value is

1.5302 and dU is 1.7423, $4-dU (4-1,7423) = 2.2577$, because the DW value is between dU and $4-dU (1.7423 < 1.848 < 2.2577)$ so there is no problem with autocorrelation.

Multiple Regression Analysis

Whether the independent variable has a significant influence on the dependent variable cannot be known from the results of the F test (F test). Using SPSS 17.0 software, the F Test results can be seen below, in **Table 1**.

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4106.198	4	1026.549	2.904	.037 ^a
	Residual	34464.827	74	468.741		
	Total	38571.025	78			

a. Predictors: (Constant), RA, RU, ROA, LNSIZE

b. Dependent Variable: UP

Source: SPSS Output, secondary data processed, 2017.

Based on the results of multiple regression analysis in the ANOVA table above, we obtained an F count value of 2.904 with a significance level of 0.037. A significance level of $< \alpha (0.05)$ means that together the underwriter reputation, auditor reputation, profitability and firm size have a significant effect on the character education of initial shares.

The results of character education, using information on the subject of underpricing based on the results of the comparison in this research are as follows. Students taught without using Information and Communication Technology (ICT) are compared to the second cycle, where students were taught using ICT based media. The data is as follows:

$$\begin{aligned} X_1 &= 88.10 & X_2 &= 68.81 \\ S_1^2 &= 11.214 & S_2^2 &= 6.785 \\ N_1 &= 28 & n_2 &= 28 \end{aligned}$$

Then the above data is distributed into the t-test formula, and the calculation is carried out as follows:

$$t = \frac{88.10 - 68.81}{\sqrt{(11.214/28 + 6.785/28)}} = 24.059$$

The calculation used the t-test formula to obtain t count 24.059; the value of t table being 2.048 with a confidence level of 95%. Thus there is an increase in learning outcomes in

character education of Underpricing subjects using ICT-based media. ICT-based media can be used in the learning process with a trust level of 95%.

Conclusion

The research and discussion in the previous chapter show that only the character education variable is a significant and negative influence on environmental care imaging effect, in relation to basic school students. For more details see as follows:

There is a significant influence underwriter's reputation for underpricing. This can be seen from the unstandardized beta values of -10,011 and the significance value < significance rate (α) 0.05 (0.001 < 0.05); There was no significant effect auditor's reputation for underpricing. It can be seen from the significant value > significance rate (α) 0.05 (0.103 > 0.05); There was no significant effect significant profitability for underpricing. It can be seen from the significant value < significance rate (α) 0.05 (0.088 < 0.05), and There was no significant effect significant company size for underpricing. It can be seen from the significant value < significance rate (α) 0.05 (0.754 < 0.05). It can be concluded that there is an increase in students' analytical skills, using media based on Information and Communication Technology (ICT) in the learning process with a confidence level of 95%. Also, Environment Education has applied at each elementary school, only teachers face obstacles still need for effective learning model that can be used as a reference; The curriculum used as a reference in learning Environmental Education is the 2013 Curriculum; For the effectiveness of curriculum implementation in 2013 required activities Teachers, Students and Parents; Elementary School Curriculum 2013 in which integrated behavioural and behavioural competencies have been formulated; The application, character education for environmental care for elementary school students has been stated and integrated in the Basic Competency document developed in the Core Curriculum on the subjects of Religion and Characteristics; It needs harmonious collaboration between teachers, principals, parents and students, in carrying out the process of character education concerned with the environment; Environmental care for elementary school students needs to be carried out continuously so that students have good character and then a better future generation of characters will be formed



REFERENCES

- Akbar, Sa'dun, I Wayan Utama. & dan Pujiyanto, (2017-a). Pengembangan Model-model Pembelajaran Tematik untuk Kelas-1 dan Kelas-2 SD, Laporan Penelitian Hibah Bersaing Tahun-2 dengan Fokus: Ujicoba Model dalam Skala Terbatas, Laporan Penelitian, Malang: Lemlit UM.
- Bohlin, E. Karen., Deborah, Farmer.& Kevin, Ryan.(2011). Building Character inSchool Resource Guide, San Fransisco, Jossey Bass.
- Etta, T. U., Ezeribe, S. N., Ekechukwu, L. E., Anyanwu, J. O., & Okoroji, L. (2016). Assessment of Computer Literacy Skills and their Utilization in the Teaching of Basic Science in Junior Secondary Schools in Imo State. *American Journal of Education and Learning*, 1(1), 25-44.
- Fasli, Jalal. (2010). Kebijakan Nasional Pendidikan Karakter: Tiga Stream Pendekatan. Jakarta: Kementerian Pendidikan Nasional. Kompas.com, 31 Agustus, 2010. Diunduh 10 Juni 20
- Kemdiknas,(2012). Pedoman Pendidikan Karakter Pada Pendidikan Anak Usia Dini. Jakarta: Dirjen Pembinaan PAUD Kemdiknas..
- Kemendiknas,(2017). Kurikulum 2013. <https://urip.files.wordpress.com/2013/02/kurikulum-2013-kompetensi-dasar-sd-ver-3-3-2013>. diakses tgl 1 juni 2018.
- Kementerian, Pendidikan. Nasional. (2010). Bahan Pelatihan Penguatan Metodologi Pembelajaran Berdasarkan Nilai-Nilai Budaya Untuk Membentuk Daya Saing dan Karakter Bangsa. Jakarta: Pusat Kurikulum, Badan Penelitian dan Pengembangan
- Lie, Anita. (2010). Pendidikan Karakter Sulit Diterapkan. KOMPAS.com, 15 Januari 2010. Diunduh 30 Januari 2011
- Lilik Istiqomah, Lusy Tunik Muharlisiani, Rizka Safriyani, Nuskhan Abid, Yulia Rizki Ramadhani, Jayuk Herawati, Indarwati, Johny Sugiono, Yuswin Harputra and Endang Noerhartati. (2018). Project-based learning in subtitling field: a description of a learning experience. *Journal of Physics: Conference Series* 1114, conference 1, 012036
- Lusy Muharlisiani, Supeno. (2018). Using Skype Messenger on Blended Learning, Weblog and E – Learning to Improve Students' Writing Ability of Students 4th Semester English Education Department Faculty of Language and Science Wijaya Kusuma Surabaya University. INA-Rxiv Papers. Created On November 25, 2017, Last Edited 02, 2018. osf.io/pk2s3/



- Lusy Tunik, Muharlisiani. (2018). Date created: 2017-12-01 10:24 AM | Last Updated: 2017-12-01 10:28 AM. Implementing Mobile Computing Exercises Based On Android in Creating Ideas to Facilitate Independence Learning of Reading Comprehension. INA-Rxiv. [Osf.io/wmvbz/](https://osf.io/wmvbz/). Created On December 01,2017. Last Edited July 02, 2018
- Lusy Tunik, Muharlisiani., Henny, Sukrisno., Emmy, Wahyuningtyas., Shofiya, Syidada. & Dina, Chamidah. (2017). Arrangement of Archives of Cloud Computing Based and Utilization of Microsoft Access. Available online at: prosiding.relawanjurnal.id/index.php/comdev Proceeding of Community Development, 1(2017): 198-204; DOI: <https://doi.org/10.30874/comdev.2017.26>
- Lusy, Muharlisiani. & Siti, Azizah. (2018). Using Animated Clip Film, blended on Learning and Dictogloss Technique to Improve Listening Skill of Students 4th Semester English Education Department Faculty of Language and Science Wijaya Kusuma Surabaya University. Created On November 25, 2017, Last Edited July 02, 2018; Supplemental Materials: osf.io/5emj3/
- Lusy, T. M., Dina, C., Abd. G. & Putu, S. K. (2019). Watermelon classification using k-nearest neighbours based on first order statistics extraction. 1st International Conference on Advance and Scientific Innovation (ICASI) IOP Publishing IOP Conf. Series: Journal of Physics: Conf. Series 1175 (2019) 012114 doi:10.1088/1742-6596/1175/1/012114
- Lusy, T. M., Endang, N., Dewie, T. W., Yatim, Riyanto & Toho Cholik Abdul Talib Bin Bon. (2019). ID. 845 Women's Leadership Policy Strategy: Improving Quality of Education (TQM) In Higher Education. Proceedings of the International Conference on Industrial Engineering and Operations Management (IEOM) Bangkok, Thailand, March 5-7, 2019; ISBN: 978-1-5323-5948-4 ISSN: 2169-8767 <http://ieomsociety.org/ieom2019/proceedings/>
- Lusy, Tunik. Muharlisiani., Anang, Kukuh. & Siti, Azizah. (2018). Designing Computer-Based Exercises Using Weblog, Hot Potatoes Software and Skype Messengers In Creating Ideas To Facilitate Independence Learning Of Reading Comprehension. Eltin, Journal of English Language Teaching in Indonesia Online ISSN: 2580-7684 Print ISSN: 2339-1561. Vol 6, No (Issue) 1 April (2018). Muharlisiani. INA-Rxiv Papers osf.io/bejmr/ Created On : Nov, 2017. Last Edited July 02,2018
- Zuchdi, D. (2012). Pendidikan Karakter, Konsep Dasar dan Implementasi di Perguruan Tinggi. Yogyakarta: UNY Press.