

The Effect of Creativity on Learning Result of Education Economic Eyes in Teaching Graduate Students Using Learning Media Based Information and Coventional Technology

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Abstract. Internal and external factors are the variables that can affect the learning outcomes of students' economic education courses. To optimize the learning outcomes of economics education subjects required knowledge about the influence of a factor and interaction factor. This study aims to determine the factor of creativity to the learning outcomes of economics education courses on students who are taught by the media of learning based on information technology and instructional media conventional. The interaction between creativity and instructional media used on students' educational economics learning outcomes is also analyzed. This study is a quasi-experiment with the population of all students of the fourth semester of Economic Education Studies Program STKIP Panca Sakti, Kota Bekasi. The sample of 120 students was taken using multi-stage random sampling technique. The data of learning result of videography and creativity is obtained by using the valid and reliable instrument. Data were analyzed by using regression analysis. From the results of data analysis can be concluded that there is an interaction between creativity and learning media (based on information technology and conventional) to result of learning subject of student education economy. In students who are taught with information technology-based media have no significant effect on the learning outcomes of the educational economy either in groups of students with high or low creativity levels. In students who are taught by conventional media, creativity has a significant effect on educational economy learning result in student group with high creativity level of determination coefficient 28,6%, while in student group with low creativity level coefficient determination 38,6%.

1. Introduction

Internal and external factors are variables that can affect the learning outcomes of student education economics courses. To optimize the learning outcomes of educational economics courses, knowledge is needed about the influence of a factor and the interaction between factors. This study aims to determine the factors of creativity in the learning outcomes of economic education courses for students taught with information technology-based learning media and conventional learning media. The interaction between creativity and learning media used in the economic learning outcomes of student education was also analyzed.

The educational economy is the study of how humans and society choose to use money or not to use scarce productive resources to produce various types of training and development of knowledge, skills, the power of thought, character etc. especially through formal education and distributing it now and later among types people and community groups.

Observations made by researchers in the fourth-semester students of the Panca Sakti STKIP Economic Education Study Program, for the value of economics in education, the 2016-2017 academic year, found 65% of students had a C grade or a passing grade for economic education courses. This is a problem that must be looked for, especially by the lecturers of economic education courses.

Understanding Learning Media Based on information technology IT (Information Technology) Media originated from Latin is the plural form of "Medium" which literally means "Intermediary" or "Introduction" which is an intermediary or introduction to the source of the message with the recipient of the message. Some experts give a definition of learning media. Schramm (1977) suggested that learning media is a messenger technology that can be used for learning purposes.

The learning media used in learning activities can influence learning effectiveness. In the beginning, the learning media only functioned as a teacher's tool to teach which was used as a visual aid. Around the middle of the 21st-century visual utilization, efforts were complemented by the use of audio devices, so audio-visual aids were born. In line with the development of science and technology (science and technology), especially in the field of education, currently, the use of assistive devices or learning media is becoming more widespread and interactive, such as the existence of computers and the internet. [1], creativity is one of the basic human needs, namely the need for self-realization (self-actualization) and is the highest need for humans.

Basically, everyone is born into the world with creative potential. Creativity can be identified (identified) and fostered through proper education [2]. Creativity is human tendencies to actualize themselves according to their abilities. Because of the diverse opinions of experts on the notion of creativity, it can be concluded that creativity is the ability of a person to produce a new product or a combination of things that already existed before, which are useful, and understandable.

Effect of interaction between learning methods and creativity on the learning outcomes of videography of students [3]. This study presents the influence of creativity on the learning outcomes of economic education courses in the group of students taught with information technology-based and conventional learning media which presumably have not been widely studied.

Research methods The research method used in this study is a quasi-experimental method. The population of this study was fourth-semester students of economic education study program, Panca Sakti STKIP. The sampling technique used was multistage random sampling. The samples were grouped into four groups: two groups of students with high creativity, each of which was taught with information technology-based learning media and conventional media, and two groups of low-creativity students who were each taught with information technology-based learning media and conventional media. Student creativity is categorized as high if the creativity score is more than 76.70 and low if the creativity score is less than 62.90 based on the analysis using Microcat ITEMAN software with the number of samples of each group equal, namely 30 students. Data collection by using learning outcomes instruments in economic education courses in the form of multiple choice tests and creativity instruments in the form of the attitude scale. The instrument of learning outcomes in economic education courses is valid and has an Alpha reliability of 0.823. Creativity instruments are also valid and reliable with Alpha reliability dimensions I 0.789, dimension II is 0.763 and dimension III is 0.654. Data analysis techniques using simple linear regression analysis where creativity as an independent variable (X) and learning outcomes (Y) as the dependent variable. Regression analysis was carried out on four groups, which then carried out a comparison or comparison of each treatment group.

2. Research result

Description of student creativity score data is presented in the following table.

Table 1. Description of Student Creativity Score

Creativity	Learning Media	Minimum	Maximum	Mean	Standard Deviation
Height	IT-Based	78	89	80.87	2.43
	Conventional	67	78	72.03	3.21
Low	IT-Based	51	53	52.27	2.36
	Conventional	33	52	44.50	5.29

Description of the data on the learning outcomes of students' economic education courses are presented in the following table.

Table 2. Description of Learning Outcomes in the Educational Economics Course

Creativity	Learning Media	Minimum	Maximum	Mean	Standard Deviation
Height	IT-Based	82	100	90.67	5.21
	Conventional	71	90	80.31	6.36
Low	IT-Based	72	97	83.63	6.65
	Conventional	61	90	76.92	7.83

The results of regression analysis on four groups of students using SPSS software can be summarized as follows.

Table 3. Results of regression analysis

Creativity	Learning Media	Regression Line Equation	P-value Creativity Coefficient	Determination Coefficient
Height	IT-Based	$\hat{Y} = 57.337 + 0.396X$	0.142	0.037
	Conventional	$\hat{Y} = 146.135 - 1.062X$	0.004	0.286
Low	IT-Based	$\hat{Y} = 82.733 - 0.081X$	0.931	0.000
	Conventional	$\hat{Y} = 126.052 - 0.937X$	0.000	0.386

From Table 3 above, it can be concluded that creativity (X) does not have a significant effect on the learning outcomes of educational economics courses (Y) on students taught with information technology-based learning media (IT) with high and low creativity levels. Creativity affects the learning outcomes of economic education courses for students taught with conventional learning media, which affects students with lower creativity higher than students with high creativity.

3. Discussion

Creativity does not have a significant effect on the learning outcomes of economic education courses for students who are taught with information technology-based (IT) -based learning media with high or low levels of creativity. This can be caused when the lecturer uses information technology-based learning media to involve fewer students, the use of information technology-based media is only used as a show without inviting students to interact during lectures, so the lecture process goes in the same direction that results in students being bored and less interested in the material presented when lectures, this is supported by [4], states that feelings of pleasure will arise when students are in a class that engages their involvement in the classroom, has a personal relationship between teacher and student, uses innovative ways of learning, and has behavioral rules clear. This relates to the factor of creativity development by giving individuals the opportunity to freely express symbolically their thoughts and feelings.

The results of this study are different from the results [3], which revealed: (1) Learning outcomes of videography students who were taught using a discovery approach were higher than those taught using the demonstration method. (2) There is an interaction between the learning approach and creativity of students' videography learning outcomes. In Ayu's research that uses discovery learning method, this learning method demands the role of students to be active in the learning process so that the learning process takes place, not in the same direction but there is an interaction between students and educators which results in students' creativity in thinking increases. The results of this study support the opinion of [2] stating, in creative individuals, if they have personal and environmental conditions that support such as the environment that provides opportunities for individuals to occupy

themselves creatively, it will be predicted that their creativity products will appear. Creative learning can be seen from two sides, namely: (1) teaching in creative (creative teaching) and (2) teaching for creative (Teaching for creativity). Teaching creatively illustrates how lecturers can use imaginative approaches so that learning activities can be more interesting, arousing and effective. While teaching for creativity is related to the use of learning forms aimed at developing students to have the ability to think and behave creatively.

Creativity has a significant effect on the learning outcomes of economic education courses for students taught with conventional learning media. The lecture process that uses conventional learning media in this study influences the learning outcomes of economic education courses, this can be caused by the delivery of lecturers that are carried out step by step with the blackboard media so as to stimulate students' curiosity, this student's curiosity triggers student creativity, in the form of question and answer during lectures so that the lecture process can take place in an interactive or two-way manner so that the understanding of lecture material can be better absorbed by students who impact on the learning outcomes of economic education courses.

The results of this study support the opinion of [2], stating that the factors that influence creativity can be in the form of thinking abilities and personality traits that interact with certain environments. Thinking ability factors consist of intelligence (intelligence) and enrichment of thinking the material in the form of experience and skills. Personality factors consist of curiosity, self-esteem, and self-confidence, self-reliance, risk-taking, and assertiveness. In creative individuals, if they have personal and environmental conditions that support such as the environment that provides opportunities for individuals to occupy themselves creatively, it will be predicted that their creativity products will emerge.

Creativity is human tendencies to actualize themselves according to their abilities. Because of the diverse opinions of experts on the notion of creativity, it can be concluded that creativity is the ability of a person to produce a new product or a combination of things that already existed before, which are useful, and understandable. Every individual has a tendency or inner drive to be creative, realize potential, express and activate all the capacities he has. This encouragement is the primary motivation for creativity when individuals form new relationships with their environment in an effort to become themselves fully

4. Conclusion

From the results of the research and discussion in this study concluded that:

1. Creativity does not have a significant effect on the learning outcomes of economic education courses for students taught with information technology-based learning media both with high and low levels of creativity.
2. Creativity has a significant effect on the learning outcomes of economic education courses for students taught with conventional learning media which affects students with low creativity by 38.6% and for students with high creativity by 28.6%.

References

- [1] Maslow, A.H.1976. *The Farther Reaches of Human Nature*. Middlesex: Penguin
- [2] Munandar 2002, *Kreativitas dan keberbakatan, strategi mewujudkan potensi kreatif dan bakat*, PT Gramedia utama Jakarta
- [3] Amalia, Ayu Nurul. (2011). "Pengaruh Metode Pembelajaran dan Kreativitas Terhadap Hasil Belajar Videografi Siswa SMK". Tesis. Program Pascasarjana, Universitas Prof. Dr. Hamka.
- [4] Rogers C.R 1982, *Towards a theory of creativity*, Dalam P.E Vernon *Creativity England* Penguin Books.

- [5] Akhir, Yaumil Agoes. (1998). *"Towards Personal Success with IQ, Social Skills, and Emotional Maturity," One-Day Seminar Papers*. Jakarta: Universitas Indonesia.
- [6] Alder, Harry. (2001). *Boost Your Intelligence*, translation Kristina Priarningsih. Jakarta: Erlangga.
- [7] Arikunto, S. (2009). *Management Research*. Jakarta: PT Rieka Cipta.
- [8] Atwater. (1993). *Expressions of Emotion, The Encyclopedia*. New York: Harvard University.
- [9] Bloom, Benjamin S. *et al.* (1981). *Taxonomy of Educational Objective: Handbook I*. New York: Longman Inc.
- [10] Briggs, Leslie J. (1979). *Instructional Design Principles and Application*. New Jersey: Newelence and Printice Hall.
- [11] Catalina, C. (1992). *Learning, third ed*. New Jersey: Prentice Hall International
- [12] Goleman, Daniel. (1995). *Emotional Intelligence*. New York: Scientific American.
- [13] Hamalik, Oemar. (1991). *A New Approach to Teaching and Learning Strategies Based on CBSA*. Bandung: CV. Sinar Baru.
- [14] Iskandar, Mukhtar. (2010). *Learning design based on Information and Communication Technology*. Jakarta: Gaung Persada Press.
- [15] Johana E. Prawitasari. (1995). *Know Emotions Through Nonverbal Communication*. Yogyakarta: Fakultas Psikologi UGM.
- [16] Kadir. (2010). *Statistics for Social Sciences Research*. Jakarta: PT Rosemata Sampurna.
- [17] Kartono, K. (1996). *Introduction to Social Research Methodology*. Bandung: CV Mandar Maju.
- [18] Miarso, Yusufhadi. (1989). *Monograph of Educational Technology*. Jakarta: Dirjen Dikti, Depdikbud.
- [19] National Education Number 20. (2003). *Materials Socialization*, Depdiknas.
- [20] Utami Munandar 2009. *Pengembangan Kreativitas Anak berbakat*. Jakarta Rineka Cipta