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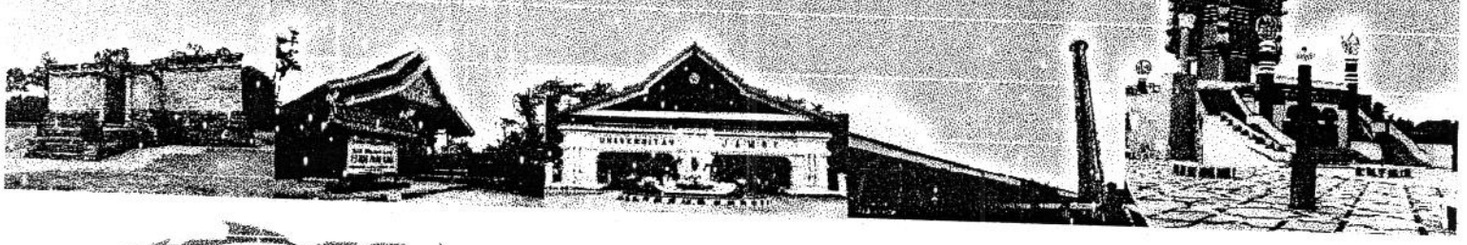

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Welcome Message

On behalf of the Conference Organising Committee, it is pleasure to welcome you to the Second International Conference on Education, Technology, and Sciences (ICETS) 2016. This conference is organized by the Fakultas Keguruan dan Ilmu Pendidikan, Universitas Jambi, Indonesia.

This conference is expected to become a medium where researchers and lecturers who are interested in the area of education, technology, and science. The general theme for the Second ICETS 2016 is integrating technology and science into early childhood and primary education. There are 69 selected papers presented in this conference.

The conference program, in addition to the keynote speakers' and authors' presentations, includes entertainment and many opportunities for networking development, making new colleagues and catching up with existing friends.

So in summary, on behalf of the Second ICETS organising committee, I am glad in welcoming you, who have travelled to Jambi City (Indonesia) for the conference. We hope that you find the conference useful to your professional development.

Syahrial Karea

Chairperson, Conference Organising Committee

THE EFFECT OF ANIMATION AND STILL PICTURE POWER POINT WITH THE LEVEL OF FARMERS KNOWLEDGE IN JAMBI INDONESIA

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ABSTRACT

This study was conducted to determine the effect of animated images and immovable images to increas the knowledge of corn farmers. This study was conducted for four month starting from 10 August to 10th November 2013 and is done using purely experimental method to provide a treatment and the is : power point program that includes animated and immovable images, then conducted pre-test and post-test by providing a questionnaire that suitable with existing material on power point program which show displays an animated images and other images. The sampling method that used in this study is simple random sampling method with specific consideration and the selection of research areas is purposive in the Jambi City Indonesia which is one of the lowland corn producing area. Information dissemination activities have not been widely reach because of limited ability and skill extention in provide information , it can be seen from the lack of farmers understanding about the importance of post- harvest activities to reduce yield loss. The data analysis in this study using the F test and T test.

Keywords: animated images, farmer, farmer knowledge,immovable images

INTRODUCTION

Indonesia is an agricultural country that largely populated livelihood and income derived from agriculture,so that this sector must be positioned as the leading sectors of the national economy.Jambi Province is one of the provinces that produce food crops in Indonesia, especially corn plants,development of corn plants have good prospects to support efforts to increase farmers' income,food security, improving nutrition community, state revenues and also can spur the reduction of imports and spur export growth. Jambi City has some people rely on agriculture one farming corn,high enough farming activities that cultivate corn plants in Jambi city is influenced by several things: the natural resources that support,Qualified human resources, availability of inputs and extension services are good.Jambi City as the study area has a land area of corn farming is high. Production problems in general are often plagued farmers in Jambi where the production results obtained less maximal in because less post-harvest activities are carried out, and it is also the adoption of farmers in applying new

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technology is still quite lacking, and in general, farmers in the cultivation of the corn crop is still traditional,PPL (extension officer) for that role in addressing the problems faced by the farmer is required.

Agricultural Extension (PPL) is the person in charge of delivering the message or information to the farmers then the message is received by the farmer and then the message carried by the farmer (Soekartawi, 2005).PPL success in conveying information to farmers is influenced by the use of media outreach capable of changing the level of understanding, attitudes, behaviors and skills of farmers in their farming activities.Material presented by PPL needs to be designed with the ability to use information technologies, one of which may include the use of powerpoint application program, so that in the process of counseling, effectiveness PPL counsel in delivering destination information may be achieved.The use of media presentation that will either facilitate PPL in conveying the material to be conveyed, then the role of the media is very important in the process of information delivery, content should be made as possible,so that the message can be received by the farmer, and the farmer is able to increase the level of understanding. Powerpoint program is a program used in the presentation process where in the program, made a presentation to be delivered and then edited in the form of a slide that can be created using special effects. powerpoint program has its advantages, namely, capable of displaying animations and still images in the presentation poses and able to provide more options in using the media presentation,weakness if participants extension (farmers) are not equipped with a module or a hard copy of the material to be delivered, then the effect of participants extension (farmers) will be difficult to repeat the material.

Based on the description above is expected with the material arranged in such a way aimed to assess the effect of the use of animated images and still images on powerpoint application of the level farmers understanding on post harvest technology of maize in the region as an alternative way of delivering messages that meet the standards ability for achievement of learning objectives counseling in conveying information to farmers, as well as the process of delivering information effectively and efficiently so that a change in atutudes, behavior, understanding and skills of farmers toward better in improving the welfare of his life, therefore the authors are interested in doing research on "The Effect of Animationand Still Picture Powerpoint with The Level of farmers knowledge in Jambi Indonesia ".

METHOD

This research was conducted throughout the District who have farming corn. The location determination is done intentionally (purposive) with the consideration that the area is a wetland corn production centers in the city of Jambi.The scope of this study was to determine the effect of animated images and still images on a powerpoint on the level of understanding of farmers on post harvest technology of maize in the city of Jambi Indonesia. This research was conducted on August 10 to November 10, 2013. The choice of location was purposively (intentionally). The sample in this study is a corn farmer, where corn farmers sampled are farmers who actively participated in the farmers' groups. In Jambi city there are 480 farmers who grow corn plants, for the basic sampling is done by a random method (simple random sampling), by taking a sample of members of the population randomly.Samples are taken as much as 10% of the farmers acquired 48 farmers.

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Data to determine the effect of treatment of an increased level of understanding of respondents then each observation indicators assessed by the scoring method, then performed the quality assessment of respondents' level of understanding of post-harvest technology in corn farming. Differences in the level of understanding of respondents tested using one-way analysis of variance by comparing the value of F is calculated by F tables.

This study is pure experimental using factorial design (Kerlinger, 1986), Using the pretest and posttest questionnaire instruments. The independent variable that will be examined are still images and pictures animations.Scores increase in the level of understanding of the respondents having seen the animated images and still images that are presented through the media power point (posttest) is reduced by an increase in the level of understanding of respondents' scores before seeing animated images and pictures silent presented through the media powerpoint (pretest).

Table 1. Experimental Research Design Matrix Pure With Factorial

Group I : Still Image (N=12)	Group III: Still Image (N=12)
Group II: Picture Animation (N=12)	Group IV : Picture Animation (N=12)

The study design is done in several steps:

1. Planning powerpoint design and development of information materials to be delivered which include; powerpoint background on the making of the application, taking pictures, making of animated images and still images, prepare materials sequentially. Preparation of the material is done through the study of literature and consultation with the local extension officer.
2. Preparation of still images is done using a digital camera or done by browsing through the internet. Results obtained from the photo shoot and then transferred to a computer which is used in the form of a digital file which is edited into powerpoint application. Media presentation is projected with the aid of a projection / infokus as channel multimedia presentations.
3. Creation of animated images is done also by using hyperlinks menu and custom animation in PowerPoint, where the photo or video that has been obtained and edited. The video image is displayed using hyperlinks in PowerPoint menu while drawing or photograph obtained by using the menu custom edited animation so that images or photos can be moved and looked as if alive. Videos and photos that have been edited are presented to the screen with the aid of projection infokus as channel presentation in conveying the information to be delivered.
4. The research involved 48 respondents using two versions of the application is to use the powerpoint application, using animation and silent picture use already prepared in the test.

RESULTS AND DISCUSSION

Efforts to improve the level of understanding of farmers to use Post-Harvest Technology of corn in Jambi need information about the benefits of post-harvest technology of corn through the media. Information needed from the farmers or PPL in the area, BP3K (Exetension and Forest Organization) and farmer leader in the local area as well as other parties who have an interest in delivering agricultural information to farmers, so farmers can overcome the

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existing problems in the cultivation of maize farming.According Hamalik (2008) states that the type of technology used in teaching consist of audiovisual media (film, filmstrip, television and video tapes) and computers. Computer media is one of the interactive media has a major role to process information quickly, accurately and with accurate results. As a media learning, computer can generate interest and attention of a person in obtaining information.

Respondents Earlier Understanding level (pretest)

Knowledge initial (pretest) of respondents in this study is done before all respondents were given the treatment, in order to present which is to determine the level of understanding of corn farmers in the study area prior to the treatment. As for the score of the level of farmers abiiity in post harvest technology of corn before the treatment can be seen in Table 1 below:

Table 1 Scores level of Farmer Respondents Before Still Image Treatment (pretest)

Score	Frequency	Percentage%
6 – 6,5	6	25
6,6 – 7,1	7	29,17
7,2 – 7,7	0	0
7,8 – 8,3	9	37,5
8,4 – 8,9	0	0
9 – 9,5	2	8,33
9,6 - 10	0	0
amount	24	100

Source: Questionnaire Results Data Processed in 2013

Table 1 showed that the highest scores on the level of initial understanding PowerPoint program using still images lies in the class from 7.8 to 8.3 as many as 9 people with the percentage as much as 37.5% and the lowest rate in grade 9 to 9.5 is as much as 2 the percentage of people with as much as 8.33%.

Table 2 Scores Understanding Levels Farmers Respondents After Still Image Treatment (posttest)

Score	Frequency	Percentage%
8 – 8,3	9	37,5
8,4 – 8,7	0	0
8,8 – 9,1	11	45,83
9,2 – 9,5	0	0
96 – 99	0	0
10	4	16,67
Amount	24	100

Source: Questionnaire Results Data Processed in 2013

Table 2 showed the value of the highest level of understanding of the respondent after the treatment with the display still images lies in the class from 8.8 to 9.1 by 11 people with the percentage as much as 45.83%, while the value of the lowest level of understanding of farmers after the treatment with display animated images lies in the class> 10 by 4 people with a total percentage of 16.67%.

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Table 3 Score Level of Understanding Farmers Respondents Before Picture Animation Treatment (pretest).

Score	Frequency	Percentage%
6 – 6,5	1	4,17
6,6 – 7,1	12	50
7,2 – 7,7	0	0
7,8 -- 8,3	11	45,83
8,4 – 8,9	0	0
9 – 9,5	0	0
9,6 – 10	0	0
Amount	24	100

Source: Questionnaire Results Data Processed in 2013

Table 3 showed that the results of the study stated that the highest value lies in the class from 6.6 to 7.1 as many as 12 people with a percentage of 50%, and the lowest score at grade 6 to 6.5 is as much as 1 to as much as 4.17%.

Table 4 Score Level of Understanding Farmers Respondents After Pictures Animations Treatment (posttest)

Score	Frequency	Percentage%
8 – 8,3	0	0
8,4 – 8,7	0	0
8,8 – 9,1	3	12,5
9,2 – 9,5	0	0
96 – 99	0	0
10	21	87,5
amount	24	100

Source: Questionnaire Results Data Processed in 2013

Table 4 showed that the highest level of understanding of the value of the respondent after the treatnent by displaying animated images lies in the class> 10 were 21 people with a total percentage of 87.5%, while the lowest value lies in the class from 8.8 to 9.1 for 3 people with a percentage as much as 12.5%.

Table 5 Analysis of variance One Way To Score Early Comprehension Level.

Variation amount	JK	dk	RK	F count	T table 5%
Average	262,5521	1	262,5521		
AK	49,59	9	5,510417	0,00685	1,9
DK	124296,9	38	3270,97		
amount	136.161	48	3539,032		

Remarks: not significant at $\alpha = 0.05$
Source: Questionnaire Results Data Processed in 2013

Results of one-way analysis of variance in Table 5 shows that the level of understanding of the score early in the fourth treatment group was not significantly different, since F count <F table ($\alpha = 0.05$), namely: 0.0065 <1.9 can thus be concluded thanks H0 = $\mu 2 = \mu 3 = \mu 4$. It

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means that the levels of understanding of the respondent farmers corn post-harvest technology is the same.

Increased level of understanding of Respondents

Based on Table 6 as a whole there is an increased level of understanding of farmers on post harvest technology of maize which is quite real.

Table 6 Scores pretest and posttest level of understanding of farmers

No	Pretest-score	Postest-score	Understanding increase
1	8	10	2
2	7	10	3
3	7	10	3
4	6	9	3
.	.	.	.
.	.	.	.
48	9	10	1
Total	369	468	105
Average	7,68	9,77	2,18

Source: Questionnaire Results Data Processed in 2013

In the table 6 shown differences improved understanding of farmers with an average overall score of 2.18 of data increase the level of understanding of farmers on post harvest technology of corn in full for each treatment group is shown in appendix 18, subsequent to determine the increase in the level of understanding of farmers do with one-way ANOVA test that can be seen in Table 7.

Table 7 Results of Analysis of Level of Understanding End Variety Respondents

Posttest	Sum of Squares	df	Mean Square	F	Sig
Between Grorps	10.583	3	3.528	8.583	.000
Within Groups	18.084	44	.411		
Total	28.667	47			

Source: Questionnaire Results Data Processed in 2013

Results of one-way analysis of variance in Table 7 shows that the level of understanding of the final score to 48 respondents were significantly different because the F count> F table (0.05 α), ie 8.583> 4.11 with a significant level of 0,000 can be concluded that the levels of understanding respoden end of lowland corn post-harvest technology in the treatment group relative increase. By the end of the F-test the level of understanding of respondents indicated that F count> F table is 8.583 <4.11. It can be concluded accept H1 reject H0, means there is a real influence on the increase in the level of understanding of farmers on post harvest technology of corn after the treatment. That is the Power Point program can improve the level of understanding of farmers using animated images and still images, it is according to that revealed by the results of thesis research Joseph Butler Ticoalu (2004), proving that the message using multimedia applications more effective in raising the level of understanding of the operator of the tractor engine Kupang State Polytechnic Agriculture in East Nusa

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Tenggara, as well as the results of the research thesis Eko Nugroho (2009) which states that the multi-media applications used to deliver material and the level of understanding of information technology in agriculture on tidal land.

Table 8 Different test pretest and posttest By Pair

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	7,35	48	.785	.113
	posttest	9.33	48	.780	.112

Source: Questionnaire Results Data Processed in 2013

The average level of understanding of farmers on post harvest technology of corn after the pretest was 7.35 while the average level of understanding of farmers on post harvest technology of corn after the post-test in this case the treatment (animated images and still images are displayed on PowerPoint program) is 9.42. The standard error of the mean of 11.3% means that the level of farmers' level of understanding of the technology of post-harvest corn after the pretest in this case the absence of treatment (powerpoint program containing animated images and still pictures) of 88.7%, while the standard error of the mean on the posttest is 11.2% means that the levels of understanding of farmers after the treatment (powerpoint program containing animated images and still images) amounted to 88.8%.

Table 9 Correlation Pair Test

		N	Correlation	Sig.
Pair 1	pretest & posttest	48	.567	.000

Source: Questionnaire Results Data Processed in 2013

Pretest and posttest correlation results in Table 9 produces 0.567 digit with a probability value above 0.05. (see significant output of 0.00). It states that the average correlation between the level of understanding of farmers on post harvest technology of corn after the pretest with an average understanding of farmers after the posttest is strong and significant.

Table 10 Samples Test Pair

		Paired Dfferences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Internal of the Difference Lower	Upper			
Pair 1	Pretest – postest	-1,979	.729	.105	-2.190	-1.767	-18.809	47	.000

Source: Questionnaire Results Data Processed in 2013

Based on the above table between pretest and posttest not identical average greater than pretest posttest which has a standard error of the mean of 10.5% means that the degree of influence after the treatment amounted to 89.5% with a significant level of 0.000. According to the above table t <t table ie -18.809 <1.68 means there can be a real influence pales use PowerPoint program in pairs then use the power point has no effect on the level of

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understanding of farmers. It is based on a comparison of t arithmetic with t table, because t count> t table it can be concluded the use of an animated picture in the pair can not increase the level of understanding of farmers (Santoso 2010).

Influence Still Image On the level of understanding Farmer

At the time before treatment the average score of respondents about the level of understanding farmers 'post-harvest technology of corn was 7.29 and after treatment using a powerpoint display still images an average score sample farmers' understanding level of 8.79. When traced more accurately, can be seen in the average score level of understanding of farmers using powerpoint that displays still images is 1.5 results of this study proved that the use of still images significantly affect the increase in the level of understanding of a sample of farmers. Hel is consistent with previous studies conducted by the research thesis Ticoalu Joseph Butler (2004), thesis research Eko Nugroho (2009), the thesis Nirwani Pane (2012), and according to the Rieber (2000).

Tabel 11 The effect of still images at the level of understanding of the farmers

No	Score Pretest	Score Posttest	Increasing Understanding
1	8	9	1
2	7	9	2
.	.	.	.
23	8	9	1
24	8	9	1
Amount	175	211	36
Average	7,29	8,79	1,5

Source: Questionnaire Results Data Processed in 2013

Influence Pictures Animations At the level of understanding Farmer

The results of the effect of the use of an animated picture of the level of understanding of the farmers can be seen in the following table:

Table 12. Score increase the level of understanding of animated images

No	Score Pretest	Score Posttest	Increasing Understanding
1	7	10	3
2	7	10	3
3	8	10	2
.	.	.	.
22	8	10	2
23	8	10	2
24	7	10	3
Amount	178	237	61
Average	7,41	9,87	2,54

Source: Questionnaire Results Data Processed in 2013

The average score increase the level of understanding of the respondents after treatment increased by an average of 7.4 and after treatment using a powerpoint display still images an

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average score sample farmers' understanding level of 9.875. When traced more accurately, can be seen in an average score increase the level of understanding of farmers using PowerPoint program that displays still images is 2.5 the results of this study proved that the use of still images significantly affect the increase in the level of understanding of a sample of farmers.This is consistent with several previous studies conducted by Research In Ticoula Joseph (2004), the motion picture is a picture that shows the process of moving in units of image space is meant here is the visualization of the object to be depicted. It can be concluded animation is a way how to turn on the stationary objects which are then projected to be moving. Animation is not only used for movies only, animations can also be used for media education, information, counseling and other media that the level of understanding in its delivery, information can be delivered easily and can be received by listeners / audience.

CONCLUSION

Based on the results of research and discussion that has been done can be concluded that the delivery of information to farmers using animated images on PowerPoint program shows an increased level of understanding that seem to be more than the delivery of information to farmers using still images, it can be seen from the results posttest experimental group using animated image that is equal to 2.5 and still pictures at 1.5.

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