

San Phetsaeng 2010: The Evaluation of 3D Animation Video on Transesterification in Biodiesel Production for Agricultural Extension. Master of Science (Agricultural Extension), Major Field: Agricultural Extension, Department of Agricultural Extension and Communication. Thesis Advisor: Associate Professor Pichai Tongdeelert, Ph.D. 142 pages.

The objectives of the study were to investigate 1) some characteristics of the trainee in biodiesel of agricultural product research and development group, Department of Agriculture 2) study the trainee's satisfaction toward 3D animation video on transesterification in biodiesel production 3) compare the knowledge in 3D animation video on transesterification in biodiesel production of the trainee.

The 40 trainees attendant in biodiesel production of agricultural product research and development group, Department of Agriculture, 2009 were the sample of the study.

The result found that majority of the trainees of 3D Animation Video on Transesterification in biodiesel production for agricultural extension were male, average age 48.6 years, completed bachelor's degree, most of them were farmer, commerce and personal profession with annual monthly income 10,000-25,000 baht. Totally, trainees' satisfaction towards 3D animation video was rated at good level. The trainees' satisfaction on color of picture, clearly voice in video and level of speech in video were rated at very good level. Also, the trainees' satisfaction on 3D animation integrated into video was rated at good level. Especially, the trainees' satisfaction on 3D animation video concerning the interest in video, the ability to decrease boredom in learning with enhancing the learning competency and its ability to create the picture of transesterification reaction in biodiesel production properly were rated at very good level. The comparison of pre-test and post-test concerning 3D animation video on transesterification in biodiesel production for agricultural extension found that the post-test has higher knowledge than the pretest at .05 level of statistical significance.

Student's signature

Thesis Advisor's signature

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