

Implementation of Student-Centered Learning Instructional Videos for Food Analysis Course

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ABSTRACT

The objectives of this study are: 1) to develop instructional videos for Food Analysis Course, especially on the subject of a) effect of pH on vegetable pigment, b) physical properties and emulsifying capability of egg, c) effect of yeast, sugar, and gluten to bread production, and d) effect of leavening agent on muffin production, 2) to measure the feasibility of instructional videos for Food Analysis Course, especially on the subject of a) effect of pH on vegetable pigment, b) physical properties and emulsifying capability of egg, c) effect of yeast, sugar, and gluten to bread production, and d) effect of leavening agent on muffin production. The study is a research and development type. Instructional videos are developed with 4D method, consisted of define, design, develop and dissemination. Data were collected by video feasibility questionnaire. The subjects of the research are the content expert, the media expert and 30 prospective users as the student at Food Production Technology Department, Universitas Negeri Yogyakarta. The results of the study are as follow. Instructional videos for Food Analysis Course at the subject of a) effect of pH on vegetable pigment, b) physical properties and emulsifying capability of egg, c) effect of yeast, sugar, and gluten to bread production, and d) effect of leavening agent on muffin production, have been developed with 4D method (define, design, develop and disseminate). Videos use mp4 format, duration of 9-16 minutes and uploaded at YouTube Channel Pendidikan Teknik Boga UNY with URL respectively: a) <https://youtu.be/ypts-zngUJk>, b) https://youtu.be/l0b_F_2pAQU, c) https://youtu.be/_HfY84Q1aL0 dan d) <https://youtu.be/bPkKbj6yxI4>. The feasibility of the video for Food Preservation Technology Course at the subjects of effect of pH on vegetable pigment according to content expert 95% very feasible, media expert 86% very feasible, and prospective users 83% very feasible. Physical properties and emulsifying capability of egg video has been measured according to content expert 96% very feasible, media content 88% very feasible and prospective users 81% very feasible. Effect of yeast, sugar, and gluten to bread production video according to content expert is 96% very feasible, media expert 90% very feasible and prospective users 82% very feasible. The feasibility of effect of leavening agent on muffin production video according to content expert is 96% very feasible, media expert 89% very feasible and prospective users 81% very feasible.

Kata Kunci: *Food Analysis, instructional video*