EXAMINING STUDENTS' CONCEPT MASTERY AND CREATIVITY THROUGH DIGITAL STORYTELLING VIDEO IN LEARNING FOOD ADDITIVES

RESEARCH PAPER

Submitted as Requirement to Obtain Degree of *Sarjana Pendidikan* in International Program on Science Education



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Skripsi ini diajukan untuk memenuhi salah satu syarat memperoleh gelar Sarjana Pendidikan pada Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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Declaration

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PREFACE

Bismillaahirrohmaanirrohiim.

All praises and gratefulness are given to Allah SWT for all His goodness and grace so that the writer can finish the study paper to fulfill the requirement for the International Science Education Program Bachelor Degree at Universitas Pendidikan Indonesia. This research paper entitled "Examining students' concept mastery and creativity through digital storytelling video in learning food additives" Shalawatand salam may always devoted to Prophet Muhammad SAW, to all his families, relatives and also to all Muslims around the world.

The research was conducted to examine the digital storytelling video towards students' concept mastery and creativity. This research paper is the last requirements for all university students in educational major to finish their study and obtain *Sarjana Pendidikan*. Those are five chapters in this research paper that are describe how is the effect of digital storytelling video to students' concept mastery and creativity in food additives topic, the research paper contains of introduction, literature review, research methodology, result of discussion of the research, conclusion and recommendation.

Perfection belongs to Allah SWT, the author knows there are so many weaknesses in this paper always has to be improved. The writer believes that feedback and recommendations to enhance the quality of the learning method in the future are most welcome. Hopefully the findings reported in this study paper can be valuable, and the next researcher can improve it.

Bandung, August 2020

The author

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EXAMINING STUDENTS' CONCEPT MASTERY AND CREATIVITY THROUGH DIGITAL STORYTELLING VIDEO IN LEARNING FOOD ADDITIVES

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ABSTRACT

Students' concept mastery and creativity were low because they have learning difficulties in classroom. Digital storytelling video is powerful tool for students who construct their own story. The aim of this research is to identify students' concept mastery and creativity through digital storytelling video in learning food additives. The method used experimental method or weak experimental method. The design of this research is one group pretest-posttest design. The sample of this research is from 8th grade of private school in Cianjur, West Java. The sample is purposive sampling. Students' creativity is measured three dimensions; novelty, resolution and elaboration and synthesis on rubric. For students' concept mastery, it is measured based on objective test. The result showed that students' concept mastery improves with N-Gain is 0.30 it is categorized as medium improvement. Highest improvement of students' concept mastery in cognitive domain C1 with N-Gain 0.33 categorized as medium. The high aspect of foods are food additives types which are (0.30) categorizes medium. Additives in human effort to reduce consuming food additives with N-Gain 0.30 indicates medium improvement than other aspects. The result of students' creativity based on three dimensions are resolution has the average score (54%) categorized as very low, revolution has average score (61%) categorized as medium. elaboration and synthesis have average score (66%) categorized as medium. Based on this result, Digital storytelling video can be used as learning tool for students' concept mastery and students' creativity.

Keyword: digital storytelling video, students' concept mastery, students' creativity, and food additives

MENGUJI PENGUASAAN KONSEP DAN KREATIVITAS SISWA MELALUI *DIGITAL STORYTELLING VIDEO* DALAM PEMEBELAJARAN ZAT ADITIF PADA MAKANAN

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ABSTRAK

Penguasaan konsep siswa masih rendah karena mereka mengalami kesulitan dalam pembelajaran di kelas. Digital storytelling video adalah alat yang efektif bagi siswa untuk menciptakan cerita mereka sendiri. Penelitian ini bertujuan untuk mengetahui penguasaan konsep dan kreativitas siswa melalui digital storytelling video dalam pembelajaran zat aditif pada makanan. Metode yang digunakan metode eksperimen. Desain penelitian ini adalah one group pretest-posttest design. Sample yang diambil adalah kelas 8 sekolah swasta di Cianjur, Jawa Barat. Sampelnya adalah purposive sampling. Kreativitas siswa diukur dalam tiga dimensi: kebaruan, resolusi dan elaborasi dan sintesis pada rubrik. Penguasaan konsep siswa diukur berdasarkan tes objektif. Hasil penelitian menunjukkan bahwa penguasaan konsep siswa meningkat dengan N-Gain 0.30 dikategorikan sebagai peningkatan sedang. Peningkatan tertinggi penguasaan konsep siswa pada ranah kognitif C1 dengan N-Gain 0.33 berkategori sedang. Aspek tinggi pada zat aditif pada makanan adalah macam macam zat aditif, dengan N-Gain 0.30 kategori sebagai peningkatan sedang, dan upaya manusia untuk mengurangi konsumsi zat aditif pada makanan dengan N-Gain 0.30. ini menunjukkan peningkatan sedang dibandingkan dengan aspek lainnya. Hasil kreativitas siswa berdasarkan tiga dimensi adalah resolusi memiliki skor rata-rata (54%) dikategorikan sangat rendah, revolusi skor rata-rata (61%) dikategorikan sedang. elaborasi dan sintesis memiliki skor rata-rata (66%) dikategorikan sedang. Berdasarkan hasil tersebut, digital storytelling video dapat digunakan sebagai sarana pembelajaran untuk penguasaan konsep dan kreativitas siswa.

Kata kunci: digital storytelling video, penguasaan konsep siswa, kreativitas siswa, dan zat aditif pada makanan

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