

**PENGEMBANGAN LEMBAR KERJA MATERI JAMUR PADA MAKANAN BERBASIS  
INKUIRI KONTEKSTUAL TERHADAP KETERAMPILAN PROSES SAINS, SIKAP  
ILMIAH DAN BERPIKIR TINGKAT TINGGI MAHASISWA PENDIDIKAN  
BIOLOGI DI UNIVERSITAS MUHAMMADIYAH TAPANULI SELATAN**

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**ABSTRAK**

Tujuan penelitian ini ialah mengembangkan lembar kerja materi jamur pada makanan berbasis inkuiri kontekstual dan mengetahui efektivitas lembar kerja yang dikembangkan yang dikembangkan terhadap keterampilan proses sains, sikap ilmiah dan berpikir tingkat tinggi mahasiswa pendidikan biologi Universitas Muhammadiyah Tapanuli Selatan. Metode penelitian ini ialah penelitian dan pengembangan (*Research and Development*) yang menggunakan model Borg dan Gall (1989). Berdasarkan hasil validasi ahli materi, ahli desain media, presentasi nilai secara berturut-turut ialah 91,84% (sangat baik) dan 96,42% (sangat baik). lembar kerja materi jamur pada makanan berbasis inkuiri kontekstual berdasarkan hasil tanggapan oleh mahasiswa pada uji perorangan, uji kelompok kecil, dan uji lapangan terbatas dinilai sangat baik dengan rata-rata skor secara berturut-turut 85%, 87.22%, dan 87.87%. Dengan demikian, dapat disimpulkan bahwa lembar kerja materi jamur pada makanan berbasis inkuiri kontekstual terkategori sangat baik dan layak digunakan sebagai lembar kerja mahasiswa. mengetahui efektivitas lembar kerja, dilakukan penelitian eksperimen semu di Universitas Muhammadiyah Tapanuli Selatan. Populasi yang digunakan ialah mahasiswa semester IV pendidikan biologi dan Sampel terdiri atas dua kelas Dik A (kontrol) dan Dik C (eksperimen) yang diambil menggunakan teknik *cluster random sampling*. Dari hasil penelitian, didapatkan nilai pada keterampilan proses sains, sikap ilmiah dan berpikir tingkat tinggi secara berturut-turut yaitu  $t_{hitung} = (7.53) >$  dari  $t_{tabel} (1.681)$ ,  $t_{hitung} = (16.79) >$  dari  $t_{tabel} (1.681)$ ,  $(2.541) >$  dari  $t_{tabel} (1.681)$  masing-masing pada level signifikansi 0.05. Kesimpulan yang didapat ialah  $H_{a1}$ ,  $H_{a2}$ , dan  $H_{a3}$  diterima dan  $H_{o1}$ ,  $H_{o2}$ ,  $H_{o3}$  ditolak, maka keterampilan proses sains, sikap ilmiah dan berpikir tingkat tinggi pada kelas yang diajarkan menggunakan lembar kerja materi jamur pada makanan berbasis inkuiri kontekstual lebih baik secara signifikan dari pada kelas yang diajarkan menggunakan lembar kerja konvensional.

**Kata kunci :** Lembar Kerja, Jamur pada Makanan, Inkuiri Kontekstual, Berpikir Tingkat Tinggi

**THE DEVELOPMENT OF CONTEXTUAL INQUIRY BASED WORKSHEET IN FUNGI ON FOOD MATERIALS TO SCIENCE PROCESS SKILLS, SCIENTIFIC ATTITUDE AND HIGHER ORDER THINKING IN BIOLOGY EDUCATION STUDENTS IN MUHAMMADIYAH TAPANULI SELATAN UNIVERSITY**

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**ABSTRACT**

The aim of this study was to develop the Worksheet in Fungi on Food Material and to know the effect of Worksheet in Fungi on Food Materials on science process skills, scientific attitude and higher order thinking ability of students of biology education in State University of South Muhammadiyah Tapanuli . The research method used in this study is Research and Development method (R&D) that followed Borg and Gall (1989) model. Based on validation result of material expert and media design expert showed percentage result respectively 91.84% (very good) and 96.42% (very good). Assessment result of individual testing, small group testing and operational field test showed result respectively 85% (very good), 87.22% (very good), and 87.87% (very good). Based on the result, the overall validation and testing of product belong to very good category and suitable to be used as based worksheet in fungi on food materials. In order to understand the effect of effect of Worksheet in Fungi on Food Materials on science process skills, scientific attitude and higher order thinking, the research method used in this study is quasi experiment. Population was all of semester IV students of biology education program of State University of South Muhammadiyah Tapanuli. Sample was consist of two classes namely Dik A as control class and Dik C as experiment class, which taken with cluster random sampling technique. From result, it was obtained that  $t_{count} = 7.53 > t_{table} = 1.681$ ,  $t_{count} = 16.79 > t_{table} = 1.681$ ,  $t_{count} = 2.541 > t_{table} = 1.681$  all at the level significance of 0.05 respectively in learning sciences process skills, scientific attitude and higher order thinking ability score, so, it means that  $H_{a1}$ ,  $H_{a2}$ , dan  $H_{a3}$  is accepted and  $H_{o1}$ ,  $H_{o2}$   $H_{o3}$  is rejected, it can be concluded that the class taught by Worksheet in Fungi on Food Materials on science process skills, scientific attitude and higher order thinking ability score than class taught by graphic media.

**Keywords: Worksheet, Contextual Inquiry, Fungi on Food Materials, Science Process Skills, Scientific Attitude, Higher Order Thinking**