

**Keefektivan Lembar Kerja Siswa pada Konsep-Konsep Biologi
Jenjang Madrasah Aliyah
(Suatu Penelitian Desain Pendidikan)
Effectiveness of Students Sheet on Biology Concepts
of Aliyah Madrasah Center
(An Educational Design Research)**

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Abstract: Educational design research aims to 1) determine the critical thinking skills of grade X MIPA MAN Kapuas' students, 2) explain the improvement of critical thinking skills. The research used Tessmer's formative evaluation design with following steps 1) expert review, 2) one-to-one evaluation, 3) small group evaluation and 4) field test evaluation as the focus of the research. The research was conducted for five months (February-June 2018) at MAN Kapuas Central Kalimantan Province. The research subjects of the student worksheets' development invertebrata concept are the students of grade X MIPA 2 with 27 students in total. The research subjects in environmental changes concept are the students of grade X MIPA 1 with 30 students in total. The research subjects in ecosystem concept are the students of grade X MIPA 1 with 33 students in total. Data critical thinking skills (defining problems, making hypothesis, collecting data, analyzing data, and making conclusions) are obtained from students' ability to work on students worksheets and scored using the rubric of critical thinking skills which is the scores obtained divided by the maximum score and expressed by%. The result of the research showed that student worksheets is used effectively based on 1) Critical thinking skills of grade X MIPA MAN Kapuas' students were classified as good category such as defining problem, making hypothesis, collecting data, analyzing data, and making conclusion, 2) There are signs of improvement in critical thinking skill, except the skill of making conclusions.

Keywords: Worksheet, critical thinking skills, educational design research

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