

## **ABSTRAK**

**NATALIA KRISTIANI LASE, Pengembangan Lembar Kegiatan Siswa (LKS) Berbasis Potensi Lokal Pada Mata Pelajaran Biologi SMA Kelas XII.**  
Tesis: Program Pascasarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengembangkan Lembar Kegiatan Siswa (LKS) berbasis potensi lokal pada mata pelajaran biologi SMA kelas XII yang layak secara empiris. Kelayakan LKS diperoleh melalui validasi ahli materi untuk menilai kelayakan isi dan kelayakan penyajian materi LKS, ahli desain untuk menilai kelayakan desain LKS, penilaian guru biologi serta respon siswa terhadap LKS yang dikembangkan. Pemanfaatan potensi lokal sesuai dengan kurikulum yang memberikan kebebasan pada setiap sekolah memperhatikan potensi sekolah dan daerah sekitar. Hal ini dapat dilakukan dengan memasukkan unsur potensi lokal dalam kegiatan pembelajaran melalui pembuatan media pembelajaran berupa LKS. Contoh potensi lokal yang telah diintegrasikan ke dalam LKS yaitu pengolahan tuak suling (diintegrasikan ke dalam materi metabolisme sel, fermentasi alkohol), pada aktivitas materi bioteknologi dimasukkan kegiatan membuat ekstrak santan kelapa untuk menghasilkan minyak makan. Penelitian ini merupakan penelitian pengembangan menggunakan model pengembangan 4-D yang terdiri dari tahap pendefinisian, perancangan, pengembangan dan pendistribusian. Namun pada penelitian ini tahap pendistribusian tidak dilakukan. Prosedur pengembangannya dimulai dari tahap: (1) analisis masalah; (2) perancangan LKS; (3) validasi dan uji coba LKS. Instrumen yang digunakan adalah lembar validasi yang meliputi aspek kelayakan isi, kelayakan penyajian, kelayakan desain dan angket respon guru dan siswa. Data validasi dan angket respon guru dan siswa yang diperoleh dianalisis secara deskriptif kualitatif. Kelayakan isi dan kelayakan penyajian LKS biologi SMA kelas XII berbasis potensi lokal yang telah dikembangkan menurut ahli materi adalah sangat baik, dimana kelayakan isi memiliki persentase skor rata-rata 88,10% dan aspek kelayakan penyajian LKS memiliki persentase skor rata-rata 91,35%. Kelayakan desain LKS biologi SMA kelas XII berbasis potensi lokal yang telah dikembangkan menurut ahli desain adalah sangat baik dengan persentase skor 97%. Kelayakan LKS biologi SMA kelas XII berbasis potensi lokal yang telah dikembangkan menurut penilaian guru dan siswa adalah sangat baik, dengan persentase skor penilaian guru 92,33%, dan persentase skor respon siswa pada uji coba perorangan adalah 77,78% (baik), uji coba kelompok kecil 85% (sangat baik) dan uji coba kelompok besar 88,79% (sangat baik).

**Kata Kunci:** Pengembangan LKS, Biologi, SMA, Potensi Lokal

## **ABSTRACT**

**NATALIA KRISTIANI LASE, Development Student Activity Sheet (LKS) Based on Local Potency for Biology Course at Grade XII.** Thesis: Graduate School, State University of Medan, 2016.

This research was aimed to develop a Student Activity Sheet (SAS) based on local potency for biology grade XII which is feasible empirically. Eligibility Worksheet was obtained through validation of subject matter experts to assess the feasibility of the content and presentation of the feasibility of worksheets, design expert to assess the feasibility of the design worksheets, assessment biology teacher and students' response to SAS developed. Exploiting local potency in accordance with a curriculum that gives freedom to each school consider the potency of the school and the surrounding area. This can be done by incorporating elements of local potency in learning activities through the creation of learning media in the form of worksheets. Examples of local potencies have been integrated into the SAS are distilled palm wine processing (integrated into cell metabolism, fermentation alcohol), the activity of the material have been incorporated in a biotechnology are activities of coconut extraction to produce edible oil. This research and development using 4-D model of development research which comprises the step of define, design, develop and disseminate, however the disseminate stage of this study was not done. The procedure starts from the development stages: (1) problem analyze; (2) design of SAS; (3) validation and field trials SAS. The instruments used were sheets covering the aspects of feasibility validation of content, presentation feasibility, feasibility of the design and questionnaire responses of teachers and students. Data validation and the questionnaire responses of teachers and students were analyzed descriptively qualitative. Feasibility content and feasibility contents presentation SAS based on local potency at biology grade XII has been developed by subject matter experts is very good, in which the feasibility of the content had an average percentage score of 88.10% and feasibility aspects of the presentation of SAS has an average percentage score of 91.35 %. Feasibility design SAS based on local potency at biology grade XII has been developed according to the expert design is very good with a percentage score of 97.00%. Result biology teacher assessment on SAS based on local potency at biology grade XII was developed 92.33% (very good). Students' response to the field trials individual testing is 77.78% (good), small group trial 85.00% (very good) and trials large group 88.79% (very good).

**Keywords:** Worksheet Development, Biology, High School, Local Content or Wisdom