**ABSTRAK**

**TAUFIEQ**. 2013. *Pengembangan Perangkat Pembelajaran Berbasis Proyek Terintegrasi Teknologi Informasi dan Komunikasi (TIK) pada Materi Jenis Limbah dan Daur Ulang Limbah untuk Siswa Kelas X SMA*. (Dibimbing oleh Muhammad Danial dan St. Fatmah Hiola)

Penelitian ini merupakan penelitian pengembangan (*Research and Development*) yaitu Pengembangan Perangkat Pembelajaran Berbasis Proyek Terintegrasi Teknologi Informasi dan Komunikasi (TIK) pada Materi Jenis Limbah dan Daur Ulang Limbah dengan tujuan; (1) untuk memperoleh perangkat pembelajaran; buku siswa, lembar kegiatan siswa (LKS), rencana pelaksanaan pembelajaran (RPP), dan tes hasil belajar (THB) yang sesuai dengan pembelajaran berbasis proyek dan diintegrasikan dengan TIK (2) untuk memperoleh perangkat pembelajaran berbasis proyek terintegrasi TIK yang berkualitas (valid, praktis dan efektif).

Prosedur pengembangan perangkat pembelajaran berbasis proyek terintegrasi TIKini mengacu pada model pengembangan Thiagarajan, Semmel dan Semmel (model 4-D), yang terdiri dari 4 tahapan yaitu pendefinisian/pembatasan (*define*), perancangan (*design*), pengembangan (*develop*), dan penyebaran (*dessiminate*). Hasil pengembangan perangkat pembelajaran berbasis proyek terintegrasi TIKmenunjukkan bahwa (1) secara umum keseluruhan komponen perangkat pembelajaran berbasis proyek terintegrasi TIK (prototype I) dinyatakan valid, (2) secara umum hasil ujicoba terbatas prototipe II telah memenuhi kriteria kepraktisan dengan hasil pengamatan terhadap keterlaksanaan perangkat pembelajaran berbasis proyek terintegrasi TIKselama ujicoba adalah terlaksana seluruhnya (3) secara umum hasil uji coba terbatas prototip II telah memenuhi kriteria keefektifan dengan hasil pengamatan selama pembelajaran berbasis proyek terintegrasi TIKadalah; (a) kemampuan guru mengelola pembelajaran berbasis proyek terintegrasi TIK kategori tinggi dan reliabel (b) aktivitas siswa telah memenuhi interval waktu ideal yang telah ditentukan, (c) persentase respon positif rata-rata total siswa terhadap kegiatan pembelajaran adalah 93,70 merespon positif dengan R= 0,94, persentase respon positif rata-rata total siswa terhadap buku siswa adalah 95,22 dan persentase respon positif rata-rata total siswa terhadap LKS adalah 90,69 (d) hasil belajar kognitif produk siswa dengan persentase ketuntasan total 94,12%, artinya hasil belajar siswa memenuhi syarat ketuntasan individual yaitu minimal 70 dan ketuntasan secara klasikal minimal 80 % dari nilai KKM.

Kata kunci : Pengembangan 4-D, Pembelajaran Berbasis Proyek, TIK, Limbah

**ABSTRACT**

**TAUFIEQ**. 2013. *Development of Project-Based Learning Package Integrated with Information Communication and Technology (ICT) on the Learning Material of Types of Waste and Waste Recycling for Grade X Students in Senior High Schools.* (Supervised by Muhammad Danial and St. Fatmah Hiola).

The study is a Research and Development which develops of Project-Based Learning Package Integrated with Information Communication and Technology (ICT) on the learning material of Types of Waste and Waste Recycling. The study aims at obtaining (1) the learning package; student’s book, student’s workbook, lesson plan, and test of learning achievement which appropriate to the project-based integrated with ICT learning, (2) a valid, practical, and effective project-based learning package integrated with ICT.

The Procedure of development of learning package referred to Thiagarajan , Semmel and Semmel’s development model (4-D) which consisted of 4 phases, namely defining, designing, development, and dissemination. The results of the development of project-based learning package integrated with ICT revealed that (1) in general, the overall components of project-based learning package integrated with ICT (prototype I) was valid, (2) in general, the limited tryout of prototype II had fulfilled the criteria of practicality based on the observation towards the implementation of project-based learning package integrated with ICT, which was completely implemented, (3) in general, limited tryout of prototypes II had fulfilled the criteria of effectiveness based on the observation towards the implementation of project-based learning package integrated with ICT: (a) teacher's competence in managing the lesson of project-based integrated with ICT was in high category and reliable, (b) student’s activites had fulfilled the set ideal time interval, (c) the percentage of positive response of the average of total students towards the learning activities was 93.70 with R = 0.94 , the percentage of positive responses of the average of total students towards student’s book was 95.22, the percentage of positive response of the average of total students towards student’s workbook was 90.69, (d) the result of cognitive learning of student’s product with the percentage of total completeness was 94.12 %, meaning that student’s learning outcomes had fulfilled the requirement of individual completeness with 70 minimally and classical completeness 80 % from the KKM.

Keywords: 4-D development, project-based learning, TIK, waste.