PENGEMBANGAN KARTU PINTAR BERBASIS MODEL *PICTURE AND PICTURE* PADA MATERI IPA SISWA KELAS IV SD N 02 SILAUT

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HALAMAN PERSETUJUAN

EXECUTIVE SUMMARY

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Disusun Oleh

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Executive Summary ini berdasarkan skripsi yang berjudul "**Pengembangan Kartu Pintar Berbasis Model *Picture And Picture* Pada Materi Ipa Siswa Kelas Iv Sd N 02 Silaut**" untuk persyaratan wisuda 2022.

Padang,   Agustus 2022
Disetujui Oleh:
Pembimbing

Pembimbing

Prof. Dr. Erman Har M.Si

pada pelajaran IPA, peneliti mengamati saat pembelajaran IPA berlangsung guru hanya menggunakan metode konvensional, dimana proses pembelajaran cenderung terpusat hanya pada guru. Guru menjelaskan materi dengan menggunakan metode ceramah dan tanya jawab saja dari awal pembelajaran sampai akhir pembelajaran tanpa menggunakan model pembelajaran, guru juga memberikan materi dengan cara mencatat di papan tulis sebagai media pembelajaran tanpa menggunakan media tambahan. Berdasarkan beberapa pernyataan tersebut, dapat dipahami bahwa rendahnya minat belajar siswa pada mata pelajaran IPA disebabkan kurangnya keterampilan guru dalam memilih model pembelajaran ini teridentifikasi dari pembelajaran yang jarang menggunakan media pembelajaran. Penggunaan media dan model dalam proses pembelajaran mempunyai arti yang cukup penting. Media dan model merupakan alat untuk membantu siswa dalam proses pembelajaran dan memahami dengan mudah. Dengan menggunakan media dan model pembelajaran, akan membantu menghilangkan kebosanan siswa dalam menerima pelajaran. Salah satunya dengan menggunakan media kartu pintar dan model *picture and picture.* Berdasarkan permasalahan yang telah diuraikan, maka peneliti tertarik untuk mengadakan penelitian dengan judul "Pengembangan Kartu Pintar Berbasis Model *Picture and Picture* pada Materi IPA Siswa Kelas IV SD Negeri 02 Silaut."

Menurut Kumala, (2016 : 6) ilmu pengetahuan alam merupakan suatu hal yang didasarkan dari gejala alam, yang mana gejala alam tersebut membentuk suatu pengetahuan dengan di awali sikap dan metode ilmiah , dari kegiatanmetode ilmiah tersebut mendapatkan suatu pengetahuan yang dapat di aplikasikan bagi umat manusia. Pada hakikatnya, IPA dibangun atas dasar produk ilmiah, proses ilmiah, dan sikap ilmiah. Selain itu, dipandang pula sebagai proses, sebagai produk, dan sebagai prosedur. Selain sebagai proses dan produk, Daud Joesoef pernah menganjurkan agar IPA dijadikan sebagai suatu "kebudayaan" atau suatu kelompok atau institusi sosial dengan tradisi nilai aspirasi, maupun inspirasi. dapat disimpulkan bahwa hakikat ipa merupakan sebagai produk, keterampilan, sikap ilmiah, dan teknologi perkembangan yang didapatkan berdasarkan gejala alam, yang mana gejala alam tersebut membentuk suatu ilmu pengetahuan.

Peneletian ini didesain dengan menggunakan metode penelitian pengembangan atau *Research and Development* (R&D). Sugiyono (2009: 407)

berpendapat bahwa, metode penelitian dan pengembanga adalah metode penelitian yang digunakan untuk menghasilkan produk tertentu, dan menguji keefektifan produk tersebut. Untuk dapat menghasilkan produk tertentu digunakan penelitian yang bersifat analisis kebutuhan dan untuk menguji keefektifan produk tersebut supaya dapat berfungsi di masyarakat luas, maka diperlukan penelitian untuk menguji keefektifan produk tersebut. Produk pembelajaran berupa modul pembelajaran yang akan membantu dan membimbing peserta didik dalam proses pembelajaran. Pada penelitian *Research and Development,* penelitian berusaha mengembangkan suatu produk berupa modul guna memecahkan masalah dalam pembelajaran di kelas. Penelitian dan pengembangan ini akan menghasilkan produk berupa model yang dikombinasikan dengan tahap pembelajaran *picture and picture* agar siswa dapat belajar mandiri tanpa bimbingan guru, maupun dengan bimbingan guru. Model pengembangan ini adalah pengembangan 4-D yang terdiri dari tahap pendefenisian *(define),* perancangan *(designe)*, pengembangan *(develop)*, dan penyarah *(disseminate)* yang telah dimodifikasi menjadi 3-D yang terdiri dari tiga tahap dan melalui revisi olen dosen ahli. Menurut Sari (2017: 23-24) tahap-tahap itu adalah pendefenisian *(define)*, perancangan *(designe)*, pengembangan *(develop)*.

Peneliti melakukan perancangan awal produk yang bertujuan untuk menghasilkan kartu pintar berbasis *picture and picture* pada IPA. Pada pembelajaran IPA materi manfaat matahari dalam kehidupan sehari-hari. Agar kartu pintar dirancang berdasarkan kebutuhan siswa dalam proses pembelajaran, langkah-langkah pada perancangan (desain). Mengumpulkan Garis Besar Media Pembelajaran, Garis besar media pembelajaran berisi identifikasi kartu pintar berbasis model *picture and picture* yang akan dibuat. Pemiihan Format Penelitian, Media yang dikembangkan sesuai dengan kurikulum 2013 revisi 2020 pada tema 2 "berhemat energi" sub tema 2 "sumber energi" pembelajaran 1 materi sumber energi dan menjelaskan manfaat sumber energi dalam kehidupan sehari-hari yang dilengkapi dengan 10 desain kartu pintar dilengkapi dengan pembelajaran 1 dan 2. pembuatan kartu pintar yang telah peneliti buat, menyediakan alat bahan seperti : PC/laptop, *printer*, gunting, kertas karton hard, pisau *cutter*,lem kertas, penggaris, pena, dan plastik press, membuat desain, background, dan pola model kartu pintar dengan laptop menggunakan canva dan word, penyusunan materi pada pola yang telah dibuat sebelumnya, tambahkan gambar latar dan hiasan pada kartu pintar agar terlihat menarik, setelah selesai membuat desain dengan menggunakan laptop, kemudian dicetak menggunakan *printer*, potong seusai dengan pola yang telah dibuat, lalu tempel cover kartu dan isi kartu dengan menggunakan lem kertas sedemikian rupa sehingga terbentuklah kartu pintar, dan kartu pintar selesai. Analisis pemprograman pengembangan kartu pintar berbasis model *picture and picture* pada materi IPA kelas IV SD N 02 Silaut dirancang melalui aplikasi *canva.* Perangkat keras yang dibutuhkan untuk menjalankan media kartu pintar berbasis model *picture and picture* pada materi IPA kelas IV SD adalah laptop, printer, dan kertas *press.* proses penyelesaian akhir media kartu pintar berbasis model *picture and picture* berupa pengemesan media pembelajaran yang telah dikonversikan ke *PDF* yang siap digunakan oleh peneliti lainnya dan dapat dikembangkan lagi.

Berdasarkan hasil penelitian pengembangan kartu pintar berbasis model *picture and picture* pada materi IPA kelas IV SD N 02 Silaut diperoleh rata-rata validitas keseluruhan 86,3 % dengan kriteria sangat valid. Sedangkan untuk pratikalitas oleh guru rata-rata kesuluruhan 95 % dengan kriteria sangat praktis dan untuk siswa rata-rata keseluruhan 92 % dengan kriteria sangat praktis.

Dari hasil penelitian ini dapat disimpulkan bahwa pengembangan kartu pintar berbasis model *picture and picture* pada materi IPA kelas IV SD N 02 Silaut sangat valid dan sangat praktis digunakan dalam pembelajaran IPA, sehingga dapat digunakan dalam pembelajaran dikelas IV SD N 02 Silaut.

EXECUTIVE SUMMARY

Arifathul Heggi. "Development of Smart Cards Based on Picture And Picture Models on Science Materials for Class IV Sd N 02 Silaut Students". Thesis. Elementary School Teacher Education, Faculty of Teacher Training and Education, Bung Hatta University

Supervisor : Prof. Dr. Erman Har, M.Si

In science lessons, researchers observed that when science learning took place the teacher only used conventional methods, where the learning process tends to be centered only on the teacher. The teacher explains the material using the lecture and question and answer method from the beginning of learning to the end of the lesson without using a learning model, the teacher also provides material by taking notes on the blackboard as a learning medium without using additional media. Based on these statements, it can be understood that students' low interest in learning in science subjects is due to the lack of teacher skills in choosing this learning model, identified from learning that rarely uses learning media. The use of media and models in the learning process has a fairly important meaning. Media and models are tools to help students in the learning process and understand easily. By using media and learning models, it will help eliminate student boredom in receiving lessons. One of them is by using smart card media and picture and picture models. Based on the problems that have been described, the researchers are interested in conducting research with the title "Development of Smart Cards Based on Picture and Picture Models in Science Materials for Class IV Students of SD Negeri 02 Silaut."

According to Kumala, (2016: 6), natural science is something that is based on natural phenomena, where these natural phenomena form a knowledge by starting with scientific attitudes and methods, from the activities of the scientific method to get knowledge that can be applied to mankind. . In essence, science is built on the basis of scientific products, scientific processes, and scientific attitudes. In addition, it is also seen as a process, as a product, and as a procedure. Apart from being a process and a product, Daud Joesoef once suggested that science be used as a "culture" or a social group or institution with a tradition of values, aspirations, and inspiration. it can be concluded that the nature of science is a product, skill, scientific attitude, and developmental technology obtained based on natural phenomena, which natural phenomena form a science.

This research was designed using the Research and Development (R&D) method. Sugiyono (2009: 407) argues that research and development methods are research methods used to produce certain products, and test the effectiveness of these products. To be able to produce certain products, research that is needs

analysis is used and to test the effectiveness of these products so that they can function in the wider community, research is needed to test the effectiveness of these products. Learning products are in the form of learning modules that will help and guide students in the learning process. In Research and Development research, research seeks to develop a product in the form of a module to solve problems in classroom learning. This research and development will produce a product in the form of a model that is combined with the picture and picture learning stage so that students can learn independently without teacher guidance, or with teacher guidance. This development model is a 4-D development consisting of the stages of defining, designing, developing, and disseminating which has been modified into 3-D consisting of three stages and through revision by expert lecturers. . According to Sari (2017: 23-24) the stages are defining, designing, developing.

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Researchers conducted an initial product design that aims to produce a picture and picture-based smart card in science. In science learning the material benefits of the sun in everyday life. So that the smart card is designed based on the needs of students in the learning process, the steps in the design (design). Collecting Outline of Learning Media, Outline of learning media contains identification of smart card based on picture and picture model that will be made. Selection of Research Format, Media developed in accordance with the 2020 revised 2013 curriculum on theme 2 "saving energy" sub theme 2 "energy sources" learning 1 energy source material and explaining the benefits of energy sources in everyday life equipped with 10 smart card designs equipped with learning 1 and 2. making smart cards that researchers have made, providing materials such as: PC/laptop, printer, scissors, hard cardboard, knife cutter, paper glue, ruler, pen, and plastic press, making designs, backgrounds, and the pattern of the smart card model with a laptop using Canva and word, compiling the material on the previously made pattern, adding a background image and decoration on the smart card to make it

look attractive, after finishing making the design using a laptop, then printing it using a printer, cut it according to the pattern that has been made, then paste the card cover and fill the card using paper glue in such a way that take the smart card, and the smart card is done. The analysis of smart card development programming based on picture and picture models in the fourth grade science material at SD N 02 Silaut is designed through the Canva application. The hardware needed to run smart card media based on picture and picture models in science material for class IV SD is a laptop, printer, and paper press. the final completion process of smart card media based on picture and picture models in the form of packaging learning media that has been converted to PDF which is ready to be used by other researchers and can be developed again.

Based on the results of research on the development of smart cards based on the picture and picture model in the fourth grade science material at SD N 02 Silaut, the overall validity average was 86.3% with very valid criteria. Meanwhile, for practicality by teachers the overall average is 95% with very practical criteria and for students the overall average is 92% with very practical criteria.

From the results of this study, it can be concluded that the development of smart cards based on the picture and picture model in the fourth grade science material at SD N 02 Silaut is very valid and very practical to use in science learning, so that it can be used in class IV learning at SD N 02 Silaut.

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