

## USING SCRATCH TO CREATE MULTIMEDIA-BASED MATERIAL IN TEACHING ENGLISH

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### Abstrak

Tujuan penulisan artikel ini adalah untuk menjelaskan bagaimana cara menggunakan program Scratch dalam mengembangkan materi pembelajaran *descriptive text* kepada siswa SMP. Materi punya peranan penting dalam proses pembelajaran. Materi dapat dikembangkan secara tradisional dan berkenaan dengan teknologi baru. Kurangnya pengetahuan guru tentang penggunaan teknologi baru dan tidak adanya pembaharuan guru tentang teknologi serta proses perancangan yang agak sedikit rumit menyebabkan kurangnya pengembangan materi pembelajaran yang berkenaan dengan teknologi ini. Padahal pengembangan materi dengan menggunakan teknologi punya banyak keuntungan. Salah satunya dapat meningkatkan ketertarikan siswa melakukan aktivitas di dalam proses pembelajaran. Selain itu, guru juga punya kesempatan untuk mengembangkan materi yang bisa digunakan di dalam kelas dan juga di luar kelas. Biaya yang digunakan untuk memperbanyak cetakan materi yang dibuat secara tradisional juga dapat dipangkas. Multimedia merupakan salah satu cara untuk mengembangkan teknologi dalam pembelajaran yang digabungkan dengan video, suara, grafik, animasi dan text. Salah satu software yang dapat menciptakan multimedia adalah Scratch. Makalah ini membahas tentang cara mengembangkan materi menggunakan Scratch dalam kemampuan mendengar, berbicara, membaca dan menulis sebuah teks deskriptif untuk siswa SMP. Penggunaan Scratch dalam mengembangkan materi diharapkan dapat meningkatkan ketertarikan siswa dalam mengikuti proses pembelajaran.

Key Word: Descriptive text, Materi, multimedia, Scratch, Teaching English

### A. Introduction

The material is one of the important things in teaching English. According to Tomlinson (2003:2), anything that is used by the teacher or learner in promoting the language learning is called material. McGrath (2002:7) also says that realia (real object), representations (photograph of something) and another things that particularly created for language learning such as textbook, worksheets, computer software are included materials. It emphasizes that material is not only about written discourse such as course books but also audio and visual. Cassettes, CD-room, video, pictures, and workbooks are included in material. Even more, teachers are also material, in this case as a material developer since they provide information for the learners.

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KTSP (2006) state that the curriculum suggests the English teachers of English through the 4 language skills; listening, speaking, reading and writing. In addition, the curriculum clearly gives the competency standard and the basic competence for material and activities in teaching English which covers listening, speaking, reading and writing. Listening arouse students to understand the meaning in spoken and written language. They are consists of two kinds of text, monologue and dialogue. Speaking is a way of giving chance for the students to express and share their ideas and thought in oral communication. So, learners should be produced the meaning in spoken and written language. Reading arouse students to understand the meaning in writing form. It is consists of two kinds of text, monologue and functional text. Then, writing arouse students to produce the meaning written form. Writing is influenced by some elements such as vocabularies, grammar, organization, spelling, and punctuation. Writing also has some material of topics that consists of two kinds of text, monologue and short functional text.

Moreover, in materials teacher could be adoption, adaptation and development. In choosing, developing or adapting materials has a number of criteria are taken. Furthermore, Vladimir & Heile (2006) add that adaptation of material can range from the adaptation of the idea to the use of existing text in a specific issue. Also, the difference between adopting and adapting is highlighted, as is the need for careful evaluation of existing materials before re-development or adaptation.

There are two ways to develop material. First is traditional way. It is usually developed in paper based or printed based. It comes in many forms, such as textbooks, worksheet, newspaper, and grammar book. Even if there is a sense of technology, is only a cassette.

Another way to develop material is related to new technology or high technology. It can be accessed through computer, mobile phone, iPad, tablet, mp3player, DVD player and so on. White (2006) stated that the new technology which is engaged with language learning as technology-mediated language learning. The technology, this includes audio, slides, videos, software computer, adobe flash player, quiz maker, scratch, multimedia, Web-based, hypermedia, and the Internet (for example: emails, youtube, blogs, Facebook, Twitter, Skype, Scootle, etc).

Nevertheless, teacher rarely use technology-mediated language learning. There are some reasons for this case. First, teacher has lack of knowledge of technology used. Teachers have been never used computer, laptop, iPad, mobile devices, etc. Teachers also do not update to the technology which is being developed rapidly nowadays. Moreover, the design process is extremely complex. The processes need to corporate with some technologies for instance the Internet, software, etc.

In contrast, using technology-mediated language learning to develop material has some advantages. Learners tend to interest with pictures, animation and video that united with technology. So, learners can be attracted with entertainment atmosphere and activities while studying. Furthermore, the recent movement of call system from CD-room to Web Based System can make possible to create system that can facilitate the emergence of online communities of learners. It means teachers have opportunities to provide materials to learners for use outside the classroom and to learners who are otherwise unable to attend classes. Besides, materials developed through new technology can easily be shared and updated. Moreover, increasing interoperability of new technologies, the use of *open source* technologies and content may make possible to reduce the overall costs of developing language learning materials. On the other hand, traditional material needs extra cost for color-printed and banding.

Related to explanation above, the writer is driven to propose multimedia in order to motivate students' interest in learning English. Multimedia consists of Multi and Media. Multi means many or more than one. Medium refers to anything that carries information between a supplier and a receiver. In addition, Gerlach and Elly (1971:282-289) in Tim Pengembangan MKDK add that media is divided into eight categories: Real thing, verbal, graphic still picture, motion picture, audio, program, and stimulations or games. Real thing is the real object that can represent the material. Using picture, graphic still picture or motion picture is included in pictures to support learners to understand the lesson. Then, audio program and games are included to interested media in teaching. It is more attractive media because they usually enjoy audio, video and games. All of these media can help teachers to promote learning in the classroom. Therefore, using a combination of video, sound, graphics, animation and text refers to the concept of multimedia.

Actually multimedia projects take many forms such as: movies, power point, web page, or electronic/print books. Scratch is one of program that can create multimedia. Bakin, 2004 (in Refnaldi) pointed out that adding pictures and sound can make classroom practice much more attractive and interactive.

One of the software that can be used to develop material is by using Scratch. Scratch is a program developed by Massachusetts Institute of Technology in coordination with the Lifelong Kindergarten Group. Monroy (2008) pointed the Scratch online community is a free and publicly available website where young people share their own video-games, animated stories, interactive art, and simulations.

Scratch is a fun and easy way to get started with the important principles of computer programming. Creating projects in Scratch allows users to become familiar with common programming concepts such as variables and control structures. Unlike most programming languages though, with scratch there is no need to learn any complicated commands as it is all visual. Programs are created by dragging blocks in to a script area in a logical and simple way.

Scratch users can download any project shared on the website, open it up in the scratch authoring environment, learn how it was made, and remix it. In scratch, the term "remixing" refers to the creation of any new version of Scratch program by adding, removing or changing the programming blocks, images or sounds.

To sum up, the Scratch software may help users/teachers in develop material with good performance and based computer media. Also, allow teachers to make interactive, Web-based material so that students' interest in doing learning process is highly motivated as Web-based is easy to use for them. And the last is this software can create anything that used in learning process.

## **B. DISCUSSION**

### **1. Introducing the Scratch**

The Scratch user interface strives to make navigation. It uses a single-window that all menus, attribute and panes are putting together on one window. Multi pane design ensures that key components are always visible. Figure 1 shows the Multi pane and single windows. Scratch also avoids floating palettes, which can get buried, and minimizes the use of panes that show only on demand. Floating palette is a system that separates the main windows with the addition windows or menus windows. Figure 2 is the example of floating palettes.

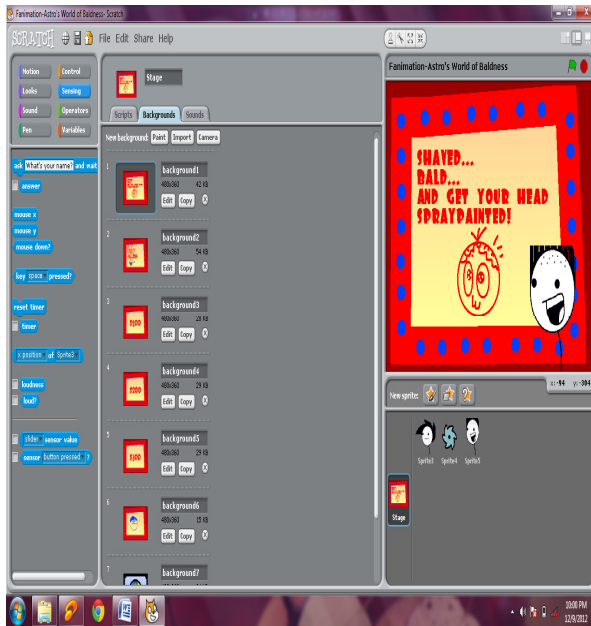


Figure 1.

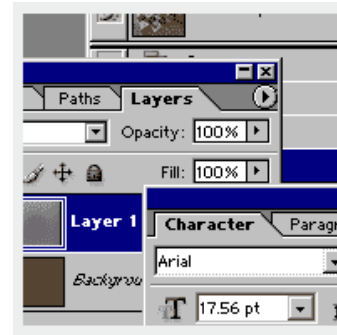


Figure 2

Figure 3 shows the Scratch window, which has four main panes. The left pane or Blocks area (a) is the command palette with buttons to select categories. The middle pane or Scripts area (b) shows the scripts for the currently selected sprite, with folder tabs to view and edit the costumes (images) and sounds owned by that sprite. The large pane on the upper right is the stage (c), where the action happens. The bottom-right pane or Sprite list (d) shows thumbnails of all sprites in the project, with the currently selected sprite highlighted.

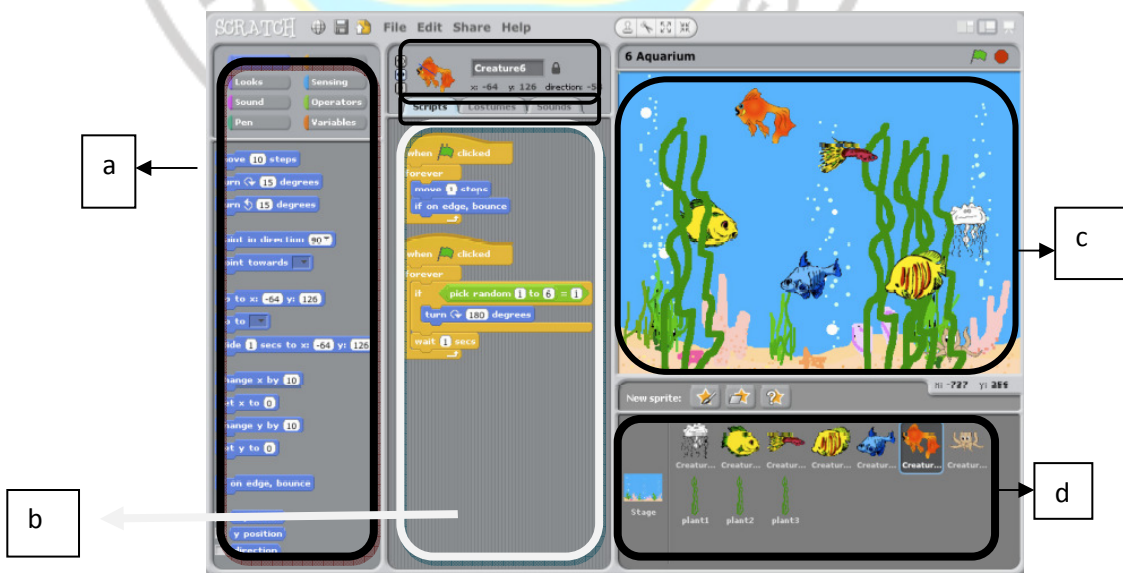
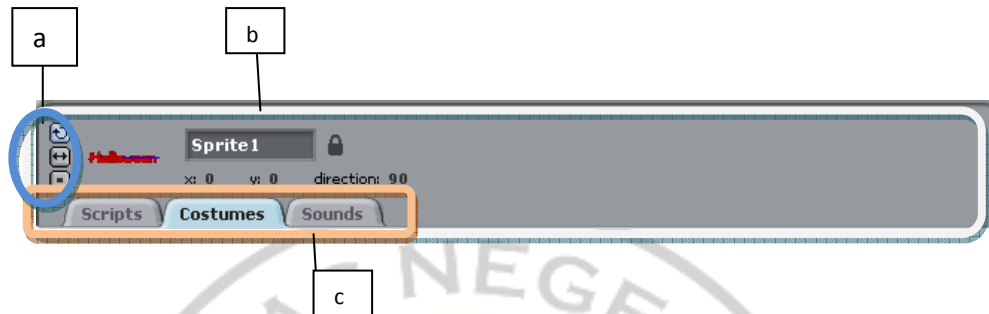


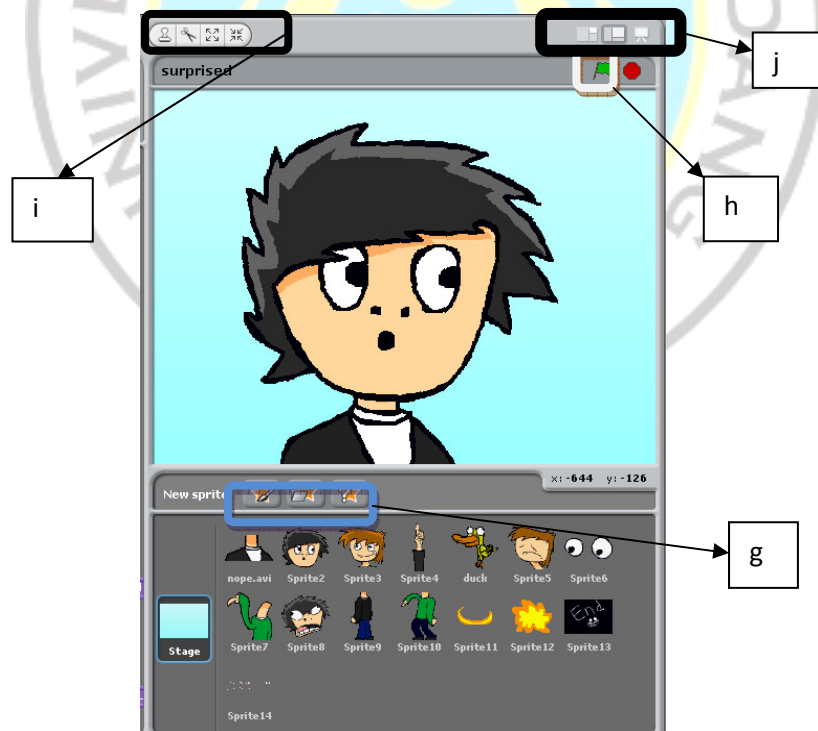
Figure 3.



Beside the four main panes, Scratch has some attributes. Attribute (a) is rotation style that use to control whether costumes rotate with the sprites. Attribute (b) is called current Sprite info. The tabs (c) use to edit sprite, costumes and sounds.



Then, the Sprite buttons (g) are to create a new character or object for your project. Green flag (h) is a way to start the scripts. Next, attribute (i) is called toolbar. Last, attributes (j) are called presentation mode.



Scratch also has some menus. There are File, Edit, Share, Help, Share project, Save, and Set language. File includes **New**, **Open**, **Save**, and **Save As** to do what you would expect them to do. File also includes **Import Project** that brings all of the sprites and backgrounds from another project into this project. This feature is useful for combining sprites from multiple projects. Figure 5 shows menus in the Scratch.

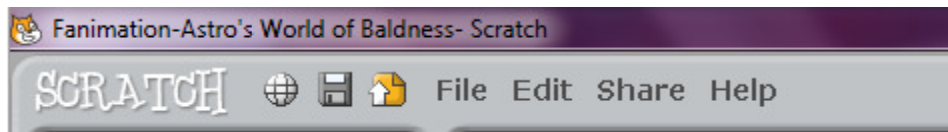


Figure 5.

Moreover, Edit includes **Start Single Stepping** that the Scratch program runs one step at a time, highlighting each block as it runs. This feature can be useful for finding bugs in programs, and for helping new programmers understand the flow of a program. Edit also includes **Compress Sounds** that is used in the project to reduce the overall file size of the sounds project and **Compress Images** that is used in the project, to reduce the overall file size of the images project.

Next, **Share** is used to upload the project to the Scratch website (<http://scratch.mit.edu>). **Help** is used to bring up a page with links to reference materials, tutorials, and frequently asked questions. To get help on an individual block, right click on the block. **Set Language** is allowed to select the language used on the Scratch blocks.

To invite scripting, the command palette is always visible. The commands are divided into eight categories such as Motion, Looks, Pen, Sensing, Operator, Variables, Sound, and Control. Command blocks are color-coded by category, helping users find related blocks. Scratch 1.4 has 125 command blocks. See appendix 1 for the description of blocks. Scratch projects are made up of objects called sprites.

## 2. The Procedures to Create Material in Scratch

### 1. Listening

In this skill, teachers should choose the topics of material that want to develop. Then, teachers run the Scratch program that has been installed before. Next, teachers click stage on the Sprite List pane. Teachers click backgrounds in the tabs and click Import to insert background 1 (see figure 6). Then, teacher paint new sprite by importing figure 7 and import sound for the Sprite 1 and sounds for the text that will be heard. After that, click Scripts in

the tabs and pull  from control blocks to the second pane. Next, teachers pulled some blocks to the second pane



Figure 6




Figure 7

## 2. Speaking

In this skill, teachers should choose the topics of material first. The topics of material that should be mastered are similar to topics of listening material that stated above.

Then, teachers run the Scratch program that has been installed before. Next, teachers click stage on the Sprite List pane. Teachers click backgrounds in the tabs and click Import to insert background 1 (see figure 8). Then, teacher paint new sprite by importing figure 9 and import sound for the Sprite 1 and sounds for the text that will be heard. After that, click Scripts in the tabs

and pull  from control blocks to the second pane. Next, teachers pulled some blocks to the second pane.

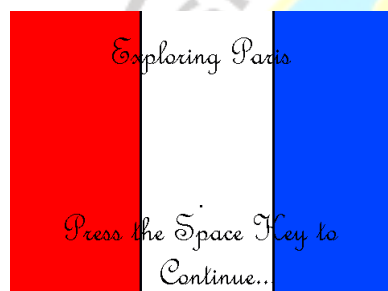


Figure 2

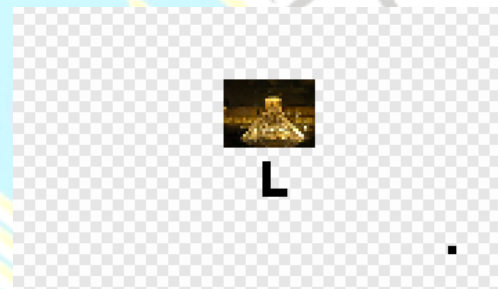


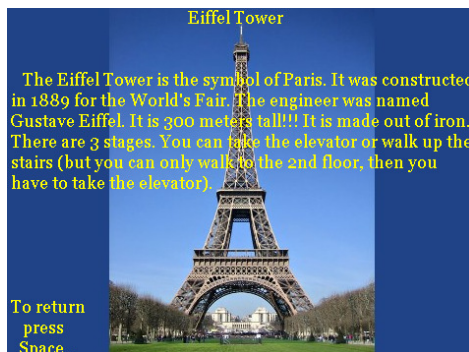
Figure 3

## 3. Reading

In this skill, teachers need to decide the topics of material that need to be developed. Then, teachers find a explanation text. Next, teachers run the Scratch program. Teachers click stage on the Sprite List pane. Teachers click backgrounds in the tabs and click Import to insert background. Teachers give right click Sprite 1 in the Sprite List and then choose Delete. Then, teachers insert new Sprite by clicking and importing in the Paint New Sprite.

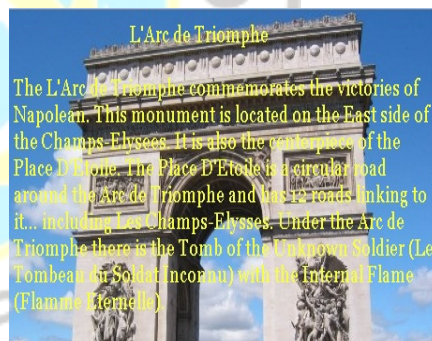
After that, teachers paint new Sprite and click Text Tool. Teachers copy first paragraph of text narrative. Teachers do the same thing to the second paragraph in the Sprite 2. In the Sprite 3, 4, 5, 6, 7, teachers import questions.

Then, teachers create the blocks by pulled the blocks into the block.



#### 4. Writing

In this skill, teachers need to decide the topics of material that need to be developed. Next, teachers run the Scratch program. Teachers click stage on the Sprite List pane. Teachers click backgrounds in the tabs and click Import to insert background. Teachers give right click Sprite 1 in the Sprite List and then choose Delete. Then, teachers insert new Sprite by clicking and importing in the Paint New Sprite. Teachers create some Sprite. After that, teachers import some music to the stage sounds. Teachers pull some block to the block area.



### C. Conclusion and Suggestion

Scratch is a fun and easy way to get started with the important principles of computer programming. Programs are created by dragging blocks in to a script area in a logical and simple way. Scratch users can download any project shared on the website, open it up in the scratch authoring environment, learn how it was made, and remix it..

The Scratch software may help users/teachers in develop material with good performance and based computer media. Also, allow teachers to make interactive, Web-based material so that students' interest in doing learning process is highly motivated as Web-based is easy to use for them. And the last is this software can create anything that used in learning process.

It is suggested that the teachers use Scratch to create multimedia-based material in teaching English. This software is supposed to arouse teacher's interest in using technology to develop material in teaching English. By using this software the



teachers make multimedia-based material that can make students enjoy in learning and they become active also creative. Moreover, the writer hopes that the researcher try to see the effect of this material to student.

**Notes:** This article was written based on writer's paper that is supervised by Dra. An Fauzia Rozani Syafei, M. A.

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