

## CHAPTER II

### THEORETICAL REVIEW

#### A. Instructional Media

##### 1. The Definition of Instructional Media

Instructional media have several types. It is important to know the definition of media before explaining that. Media comes from Latin language and it is plural form from the word “medium”, which literally means “intermediary or introduction”. Therefore, it can be concluded that media is tool for distributing learning information or distributing messages.

In teaching and learning proces, media has important meaning because when there is uncertain in the learning process or in delivering the material, here is the important role of instructional media that can be called as mediator to deliver messages. The complexity of the material that will be delivered to students, can be simplified with the help of media. Djamarah & Zain (2010:120) stated that “media can represent what teacher is less capable of saying through certain words or sentences”. Therefore, students will be easier to understand the material with the help of media. Also can be understood that media is a tool that can be used as a distributor of messages to achieve learning goals.

Hamalik in Arsyad (2007:15) stated that the use of instructional media in teaching and learning process can increase new desire and interest, increase motivation and stimulation of learning activities, and also bring

psychological influences toward students. The use of instructional media at the learning orientation stage will greatly help the effectiveness of learning process and delivering messages and the contain of the material at that time. Besides increasing motivation and interest of students, instructional media can also help students to increase their comprehension, present data interestingly and reliable, facilitate data interpretation and compress information.

With the reference to the paragraphs above, it can be concluded that instructional media is a tool for distributing learning information or distributing messages. Furthermore, instructional media can represent what teacher is less capable of saying through certain words or sentences. Besides that, instructional media can attract students' motivation and interest, so students will be easier to understand the material with the help of media.

## **2. Types of Instructional Media**

Instructional media are divided into several groups. Djamarah & Zain(2010:124)divided instructional media into three types, namely Audio, Visual, and Audiovisual Media.

### **1) Audio**

Audio means that media is only can be heard. People can not see this media because the media is only focus on sound, such as radio, cassette recorder, and so on. This media is not suitable for people who have a disorder with the sense of hearing.

## 2) Visual Media

Same as the other media, visual media has function to deliver the message. In delivering the message, this media is displayed with visual symbols. The function of visual media is to attract attention, clarify the delivering of ideas, describe facts so people are not easy to forget.

In teaching and learning process, visual media is widely used by teacher to convey the contents of the learning themes being studied. Visual media has important role to facilitate understanding and strengthen of memory. Generally, visual media consists of media that can be projected (projected visual) and media that can not be projected (non-projected visual). Visual media that can be projected is a media that uses the help of a projection tool. To deliver message or information, this media must use electronic devices. Beside that, Visual media that can not be projected can be divided into two types, namely silent visual media and dynamic visual media. There are some kinds of visual media, such as:

### (a) Silent visual that be projected

- Opaque projection
- Overhead projection
- Slides

- Filmstrips

(b) Visual that is not projected

- Picture, poster
- Photo
- Charts, graph, diagram

(c) Dynamic visual that projected

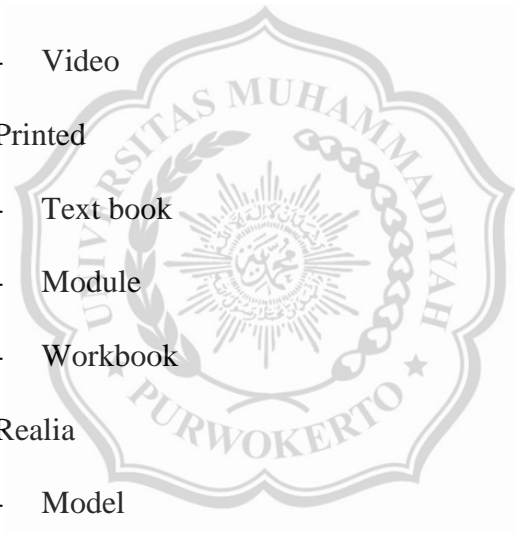
- Film
- Television
- Video

(d) Printed

- Text book
- Module
- Workbook

(e) Realia

- Model
- Specimen
- Manipulative (map, doll)



3) Audiovisual Media

Audiovisual media is a media that has sound and image elements. This type of media has better capabilities, because it covers both the first and second types of media. Audiovisual media is a combination of audio and visual media, or commonly called

hearing media. With more complete characteristics, audio-visual media has the ability to overcome the shortcomings of audio media or from visual media. The functions and capabilities of audio-visual media will increase when equipped with motion characteristics. Then, it is able to convey messages that are more complicated and more realistic.

Arsyad (2007:56) stated that “*Lingkaran Tajwid*” is one of the instructional media which includes the classification of print-based media. Meanwhile, in this research, the researcher use Magic Disc as an instructional media. Seen from the shape, Magic Disc is the same as *Lingkaran Tajwid*, so Magic Disc included as visual media, precisely printed visual media. It is because in delivering message, Magic Disc uses principle deliver the message through visual symbols. Besides that, it involves the sense of sight. Magic Disc as visual media, aims to foster students’ interest and can provide a connection between the content of subject matter and the real thing.

### 3. Contribution of Media to the Learning Process

Media is one of the components that should be employed in teaching and learning process. The use of instructional media in learning activities will have a positive impact on both students and teacher. One of the positive benefits for students is increase learning motivation for students. Thenfor the teacher, the use of instructional media will provide a more varied teaching method. The following are the benefits of learning media in student learning according to Sudjana and Rivaiin Azhar Arsyad(2007:24):

- a. Learning will be more attract the students'attention, so it can foster the learning motivation.
- b. The meaning of the learning material will be clearer,sostudents canunderstand the material easily. It enable them to master and achievethe learning goals.The use of learning media can help students to facilitate understanding the material presented.
- c. The method of teaching will be more varied, not merely verbal communication through the words spoken by the teacher, so that students are not bored and the teacher does not run out of energy.
- d. Students can do more learning activities because they not only listen to the teacher's explanation, but also other activities such as observing, doing, demonstrating, acting and others.

#### 4. The Principles of Selecting Instructional Media

There are many of considerations in selecting instructional media before teacher use it in learning activity. Teacher can not use an instructional media for all materials because instructional media will be used based on the learning objectives. From that, before using an instructional media, it is important to select the proper media such as select an instructional based on the material and also the learning objectives, select an instructional media based on the students' need and interest. The most important things in selecting an instructional media is the message that delivered by the teacher because this is the role of media that to help teacher in delivering the materials for students.

Other things that should be considered by teacher in selecting instructional media is the availability and also the accessibility of instructional media itself. To solve these problems, teacher should consider the use and accessibility of the instructional media. In other words, teacher can look for the instructional media substitutes and find the alternatives. For instance, teacher can produce an instructional media. Based on the accessibility criteria, Rahardjo in Mahnun (2012:30), stated that media can be divided into two kinds:

##### a. Media by utilization

Media by utilization means that this media usually made for commercial purposes and available in the market. Teachers can choose and utilize this media, even they must spend their money to buy this media.

b. Media by design

Media by design is a media that teachers should develop by themselves. In this case, teachers are required to be able to design and develop their own media in accordance with the facilities and equipment that they have.

From the explanation above, it can be concluded that to select the instructional media, teacher should do some considerations such as considering the learning objectives, materials that will be delivered, students' need and interest, and also considering about the ability to design and use the instructional media.

The instructional media is intended as a tool to facilitate the achievement of teaching goals. That is why the teacher must pay attention to several principles before choosing and using the instructional media. There are some principles of the use of media in teaching learning process. Sanjaya(2012) as cited in Hardiyanti (2016:11) said that those principles are:

a. Media is used to make students' easier in understanding the material.

Thus, the use of media should be viewed from students' need, not from teachers' need.

b. Media which is used by the teacher should be appropriate and be directed to get the purpose of learning process.

c. Media which is used should be appropriate with the material. Every material has a characteristic.

- d. Media should be appropriate with the students' interest, need, and condition. The students who has less ability on hearing, he will be more difficult to understand the material when it is used as auditif media.
- e. Media should pay attention to the effectiveness and efficiency. Media which needs expensive tools is not necessarily effective to get the aim of material.
- f. Media should be appropriate with the teachers' ability in operating it.

## **B. Magic Disc**

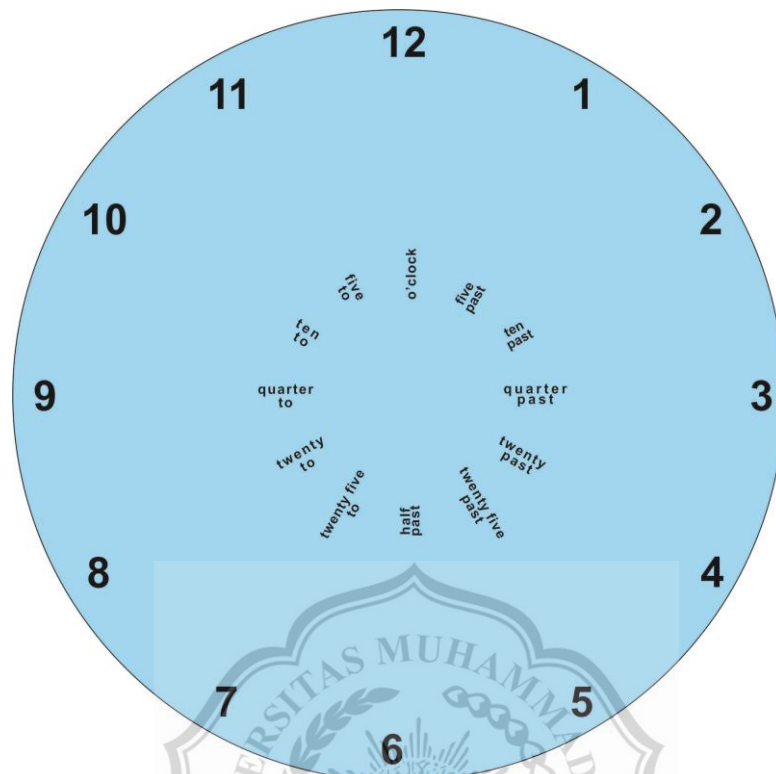
Teacher can use instructional media in teaching. Instructional media is used to help the teacher in delivering the learning materials. One of the instructional that can be used in teaching telling time for the seventh grade students is by using Magic Disc. The media is very simple, easy to make and also easy to use by the teacher. Magic Disc comes from word "Magic" and "Disc". Kurniati in Azizah (2018: 31) stated that "Magic Disc consists of two circular shapes (Discs). Between one part and the other part combined with a button (as) in the middle."We can use Magic Discby rotating one part or both clockwise or otherwise, so that it is of practical value and very helpful in the learning process.

Magic Disc can be used as instructional media for several subjects such as Physics, English, Math, Javanese, and others. Nowadays, many researchers use Magic Disc in delivering the materials. They use it to facilitate teacher and students in teaching and learning process. Beside that, Magic Discis modified

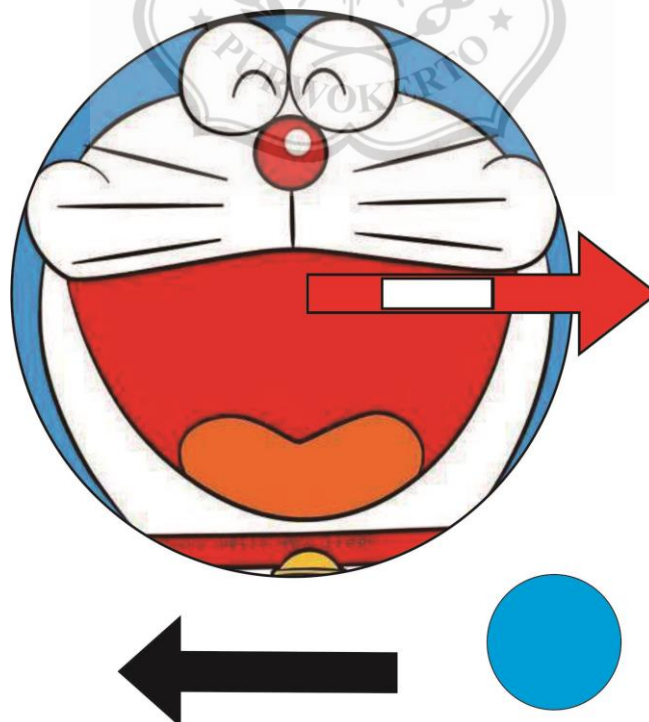
in many shapes. In this research, the researcher has modified Magic Disc in the shape of clock. The function is to help students and teacher in teaching Telling Time.

### **1. Specifications of Magic Disc**

- a) Magic Disc is one of the printed media that is made from ivory paper. The shape is circle (like a disc) and the size is 22 cm x 18 cm.
- b) Magic Disc contains of material about Telling Time which is equipped with vocabulary related to the material, such as: hour, minute, second, past, to, quarter, half, etc. The choice of vocabulary was based on the suitability of the material taught for seventh grade students in Junior High School.
- c) Magic Disc is arranged based on the seventh grade of elementary competency in English subjects, namely:
  - 3.3 Understand the social function, text structure, and linguistic elements of the text to state and ask for the name of the day, month, name of time in days, times in the form of numbers, dates, and years.
  - 4.3 Prepare oral and written texts to state and ask for the name of day, month, time of day in time, time in the form of numbers, dates, and years, with correct and contextual elements of language.



Disc 1



Disc 2, the clockwise, and the as

### Vocabulary terkait Telling Time

- o'clock: tepat
- past: lebih
- to: kurang
- a quarter past: lebih 15 menit
- a quarter to: lebih 45 menit
- a half past: lebih 30 menit

### Penjelasan:

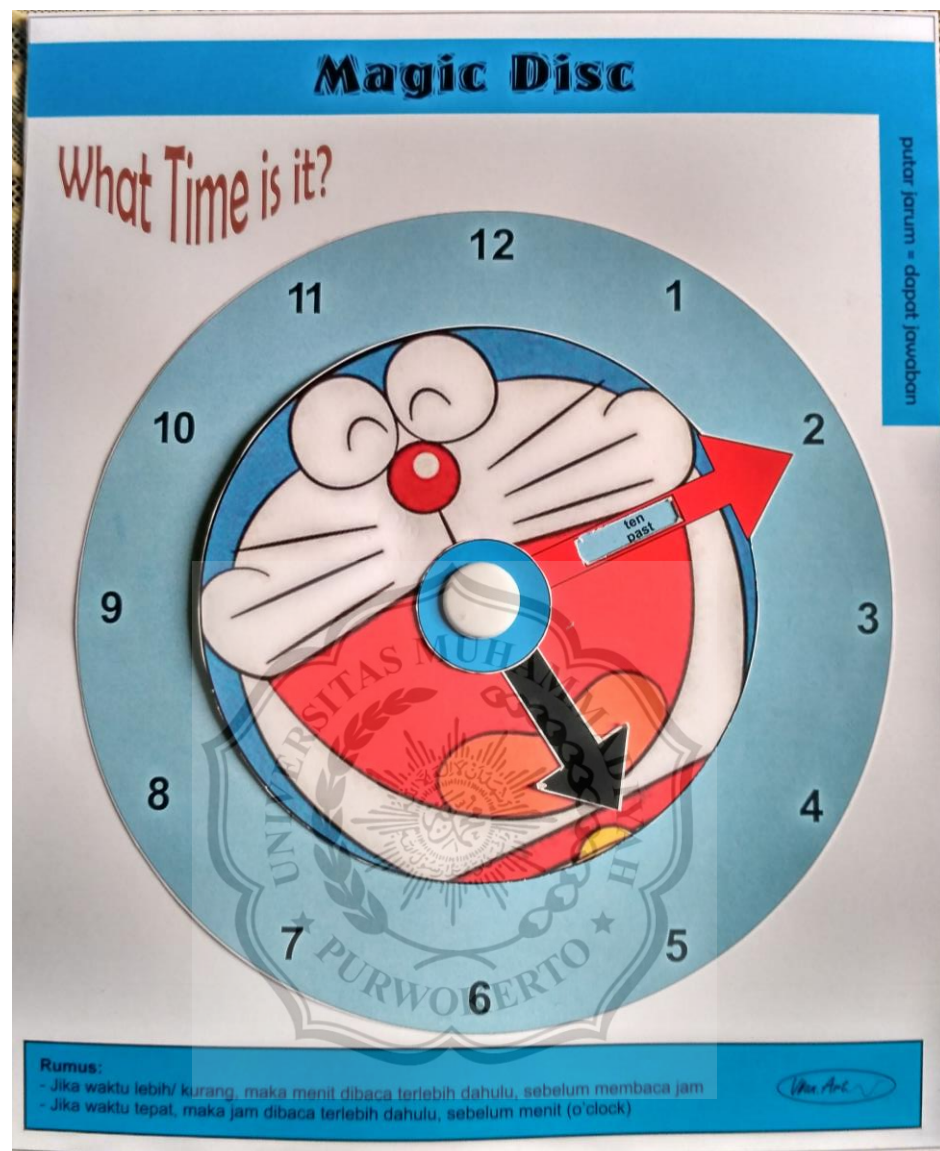
1. **o'clock**: jika jarum menunjukkan waktu tepat (jarum panjang menunjuk angka 12)  
contoh: 03.00 = three o'clock
2. **past**: jika jarum menunjuk angka 1-6 (menit ke satu sampai ke tiga puluh)  
contoh: 6.25 = twenty five past six, 9.30 = half past nine
3. **to**: jika jarum menunjuk angka 7-11 (menit ke tiga puluh satu sampai menit ke lima puluh sembilan)  
contoh: 8.50 = ten to nine, 2.45 = a quarter to three
4. **a quarter**: jika jarum menunjuk angka 3 dan 9 (menit ke lima belas dan empat puluh lima)  
contoh: 7.15 = a quarter past seven, 11.45 = a quarter to twelve

### Rumus:

- Jika waktu tepat, maka **jam** dibaca terlebih dahulu, sebelum menit (o'clock)
- Jika waktu yang ditunjukkan **lebih/ kurang**, maka **menit** dibaca terlebih dahulu, sebelum membaca jam.
- Jika waktu menunjuk angka 1-6 (menit ke satu - ke tiga puluh), gunakan **past** yang artinya 'lebih'. Jangan lupa, baca **menitnya** terlebih dahulu sebelum membaca jam.
- Jika waktu menunjuk angka 7-11 (mulai dari menit ke tiga puluh satu - ke lima puluh sembilan), gunakan **to** yang artinya 'kurang'. Jangan lupa, baca **menitnya** terlebih dahulu sebelum membaca jam. Namun pada penggunaan to, jam **ditambahkan 1**.  
contoh: 5.55 = five to **six**  
five berasal dari 60 (1 menit) **dikurangi** 55 menjadi lima. Sementara, six berasal dari lima lalu **ditambah 1** menjadi enam.

## 2. How To Use Magic Disc

- a) There are two clockwises in Magic Disc. A black clockwise is used to show the hour. Then the red clockwise is used to show the minute.
- b) Turn the clock on Magic Disc according to the desired time. Do not forget to see the formula: If the time shown is precise, reading the hour first before reading the minutes (for example: 10.00= ten o'clock); If the time shown the time more or less minutes, reading the minutes first before reading the hour (for example: 8.25= twenty five past eight).



### 3. The Advantages of Using Media Magic Disc

- By using Magic Disc, learning activities will be presented more interesting.
- Magic Disc can attract students' attention.
- Magic Disc as a learning media is a tool that can help students to remember the material easily.

- d) Magic Disc consists of formula to help students in remembering how to read time in English.

(Anwar in Gultom, 2016)

#### **4. The Disdvantages of Using Media Magic Disc**

- a) Magic Disc is made of ivory paper, so it can be damaged easily.
- b) Magic Disc has small size, so before distributing Magic Disc the teacher have to divide the students into some groups to make the learning more conducive.

#### **5. Teaching Use Magic Disc**

After knowing the advantages and disadvantages of using Magic Disc as instructional media, teacher can use Magic Disc to teach the material about "Telling Time". There are some steps that can teacher implement to teach the material by using Magic Disc:

- a) Teacher can divide students into some groups. One group consist of 4-5 students.
- b) Teacher disributes the Magic Disc to each group. One group get one Magic Disc.
- c) Teacher starts the teaching by giving the formula to students, so the students can remember easily. The formula such as the distinguish between 'past' and 'to', how to read the time when the clockwise shows in each number (1-12), and so on.

- d) After giving the explanation, teacher can test the students' understanding by giving questions orally. Beside that, the teacher can ask each group to answer the questions in a scramble.
- e) To know the students' understanding, teacher can ask the students to answer the questions individually by giving questions sheet.

## 6. Relevant Research

Magic Disc is an instructional media that can be used for many subjects, not only for English subject. There are some kinds of Magic Disc, such as Magic Disc for Math subject which contains of formula about geometry, Physics which contains of formula in Physics material, Javanese language to learn about Javanese script, and others. Below are some of the relevant researches with this research, such as:

- a) Siswi Nuraini (2015) “Pengembangan Magic Disc Aksara Jawa Sebagai Media Pembelajaran Mandiri Untuk Siswa SD/MI Kelas V Semester 1”. The researcher made this Magic Disc as a media to help students in learning Javanese language with Javanese script material. It can help students to learn Javanese script independently. The result of this research is the Magic Disc Aksara Jawa (MDAJ) can be used as instructional media because the media has been tested by several experts.
- b) Harmini (2009) “Perbedaan Hasil Belajar Siswa Kelas VIII yang Menggunakan Permainan Bingo dan Magic Disk Pada Mata Pelajaran

*Bahasa Inggris Pokok Bahasan Irregular Verbs Di Smp Brawijaya Smart School Malang*”. This research was conducted with a quasi-experimental research design method. The subjects of the study were eighth grade students of Malang Brawijaya Smart School. The number of students in Class VIII A were 35 students and VIIB were 34 students. The research instrument were documentation of photos of teacher and student activities during the learning process and test of learning outcomes.

From the results of the T-test for homogeneous variance obtained t-test score of -1.037. With  $dk = 67$ , the t-table is 1.99. Because t-test score  $<t\text{-table} (-1,037 <1,99)$  and Sig value  $> 0,05 (0,304 > 0,05)$  then  $H_0$  is accepted. Based on the calculation of student learning outcomes in the subjects of the English subject of irregular verbs using a real level of 0.05, it was evident that there were no differences in English learning outcomes in the subject of irregular verbs between students taught using bingo and magic dics. The results showed that the average value of learning outcomes on the subject of irregular verbs was equally increased after being treated by using bingo and magic disk games repeatedly.

Based on the explanation above, Magic Disc is an instructional media that can be used in several subjects and can be implemented for teaching in many levels. Lately, Magic Disc was made in various forms

based on the needs and the goals of learning. From the previous studies that were mentioned, Magic Disc is the effective media in teaching.

This research is different from the two previous researches. The research was focused on the effectiveness of Magic Disc in teaching telling time, while the previous researches were focused on developing the media (Magic Disc Aksara Jawa) and developing students' vocabularies (Magic Disc English). From the subject also different, the subjects of (Magic Disc Aksara Jawa) was conducted in Elementary School while this research was conducted in Junior High School.

### **C. Basic Assumption**

Media is a tool that be used to deliver the message and also can facilitate the delivery of message. In other hand, media that used in learning activity, called as instructional media. The function of instructional media is same as media in generally, that is as a tool to deliver the message. The differences is in the objectives, because instructional media is used to deliver the message or information of education aspect by the teacher in the teaching and learning process.

Telling time is one of the material that be taught in seventh grade of Junior High School. Magic Disc can be choosen as an instructional media to help students understanding the material about telling time. Beside that, Magic Disc is one of printed media that easy to be made by teacher and it can attract students' attention also help students to understand the material about telling

time in English. Therefore, it is assumed that Magic Disc is effective for teaching materi about telling time in English.

#### **D. Hypothesis**

Based on the basic assumption above, the hypothesis for this study is that teaching using Magic Disc is effective.

