

# MEDIA PEMBELAJARAN BIOLOGI



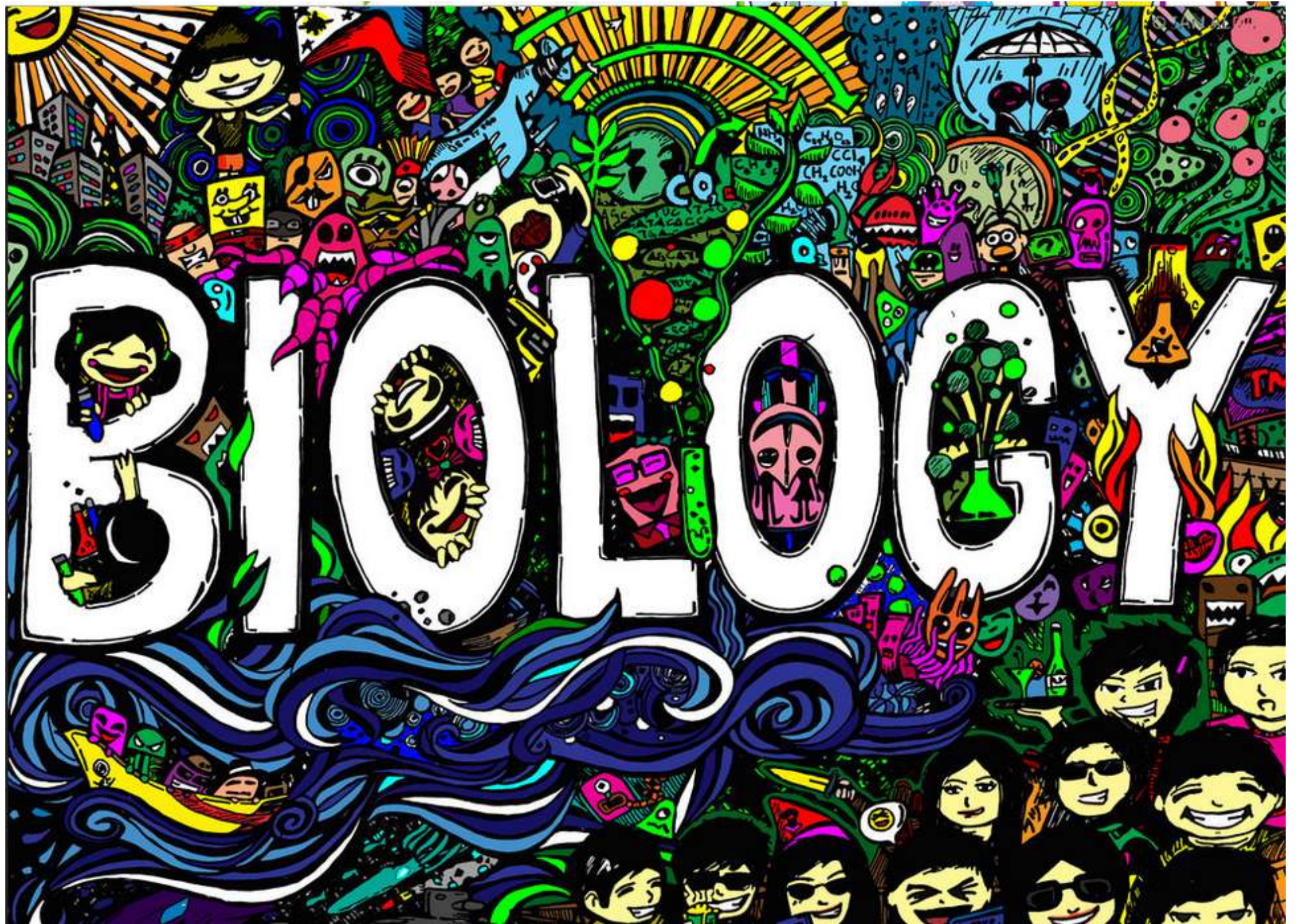
**CHAPTER 7— KARAKTERISTIK,  
PEMILIHAN DAN PERAN MEDIA  
PEMBELAJARAN BIOLOGI**

**Husni Mubarak, S.Pd., M.Si.**  
Tadris Biologi IAIN Jember



## APA YANG AKAN KITA PELAJARI?

- A. Karakteristik Media Pembelajaran Biologi
- B. Jenis Media Pembelajaran Biologi
- C. Peran Media Pemb. Biologi
- D. Pengembangan Media Pembelajaran Biologi
- E. Contoh Hasil Penelitian Media Pembelajaran Biologi



## Karakteristik Siswa dlm Pembelajaran Biologi..??



*Jas Lab  
Cetar*

**SERSAN  
(SERIUS SANTAI)**

Lainnya....??

**RASA  
PENASARAN**

**Kalo Rajin →  
Rajin banget**

**Kalo Males →  
Males beud**

**ANTUSIAS**

*Apa2 di-cekrek*

*Bahan & Alat  
Praktikum Seabrek??*

*Apa2 dicatat*

## Karakteristik Guru Biologi..??

**Humoris??**

**Mampu  
melakukan  
pembelajaran  
Biologi**

**Kreatif  
Inovatif  
Motivatif**

**Tanggung  
Jawab**



**Mampu  
Berkomunikasi  
/ Berinteraksi  
dgn Siswa,  
Alam Sekitar**

**Menguasai  
Ilmu Biologi**

**Mampu  
Mengelola  
Kelas & Lab**

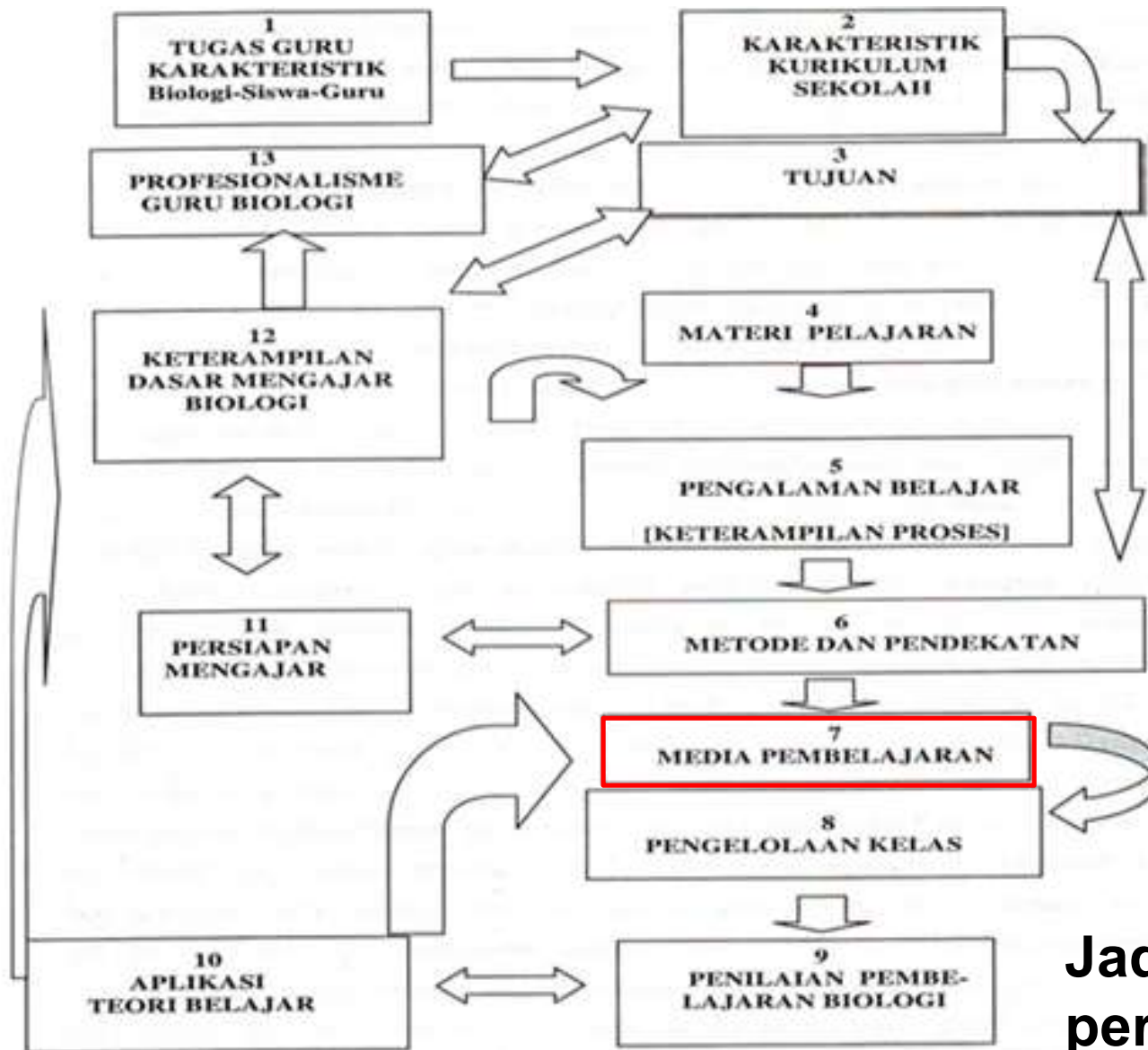
**Lainnya....??**

## KARAKTERISTIK MEDIA PEMBELAJARAN BIOLOGI

- Tidak harus berasal dr perusahaan pembuat media ttp bsa didapatkan dr alam/ lingkungan sekitar
- Biasanya sangat beragam/ tdk mengandalkan satu media/ media tunggal
- Biasanya sangat menarik
- Krn dpt berasal dr alam/ lingkungan sekitar → mampu mnyajikan materi scr real/ fakta → pengalaman lngsung



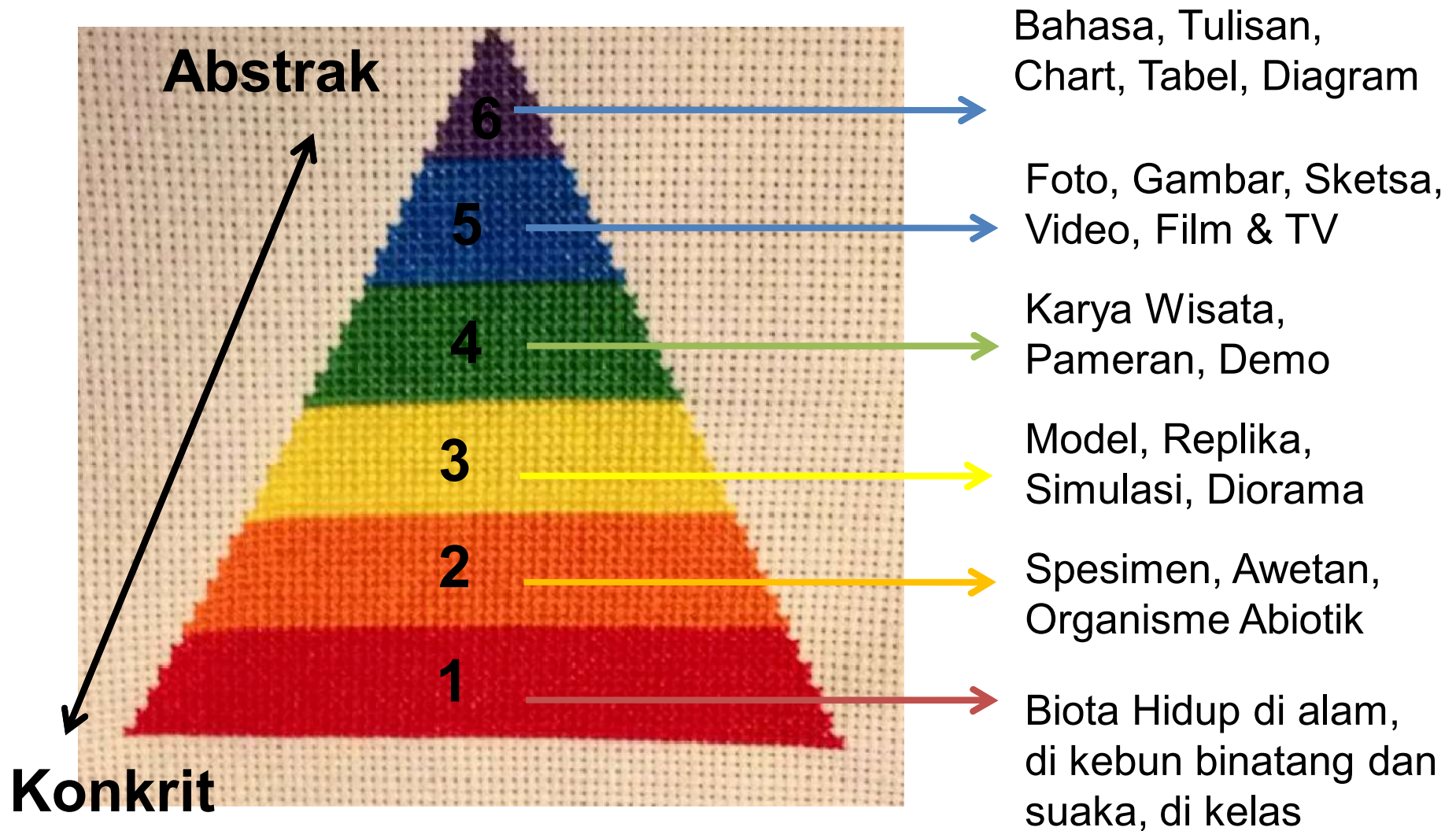
# Diagram Alir Komponen Pembelajaran Biologi



Jadi apa  
perannya..?

# Pyramid of different media as used in Biology

(Allers, 1995:82; Cawood et al., 1982:195).





# CLASS 1 - LIVE BIOTA

- Biota Hidup → tumbuhan/ **hewan hidup, nyata dan asli**
- Dapat dijumpai scr lngsung di alam/ kebun binatang/ marga satwa
- Dpt jg ditempatkan di kelas/ kandang
- Ikan → Akuarium
- Serangga → Insektarium
- Cacing → terrarium
- Ular/ mencit → kandang

**MEDIA ASLI DI ALAM LIAR**



# MEDIA ASLI DI KEBUN BINATANG



## MEDIA ASLI DI SANCTUARY





**Aquarium in Class**

## Insektarium + Library



Ecobottle - Terrarium





**BIONIC 2015**

ECOLOGICAL STUDY TOWARD A SUSTAINABLE AGRICULTURE

# WORKSHOP TERRARIUM



## APA ITU TERRARIUM ?

Terrarium adalah seni menanam tumbuhan untuk menciptakan miniatur ekosistem alami yang biasanya menggunakan wadah kaca. Terrarium bisa dibuat dalam berbagai ukuran. Sifat inilah yang membuatnya sangat praktis untuk disimpan di dalam ruangan. Sehingga walaupun rumah kita sempit dan tidak memiliki halaman, kita tetap bisa berinteraksi dengan alam pada kehidupan sehari-hari.

**MAU TAU CARA BUATNYA?**

daftar di :

**[bit.ly/bionic\\_2015](http://bit.ly/bionic_2015)**

**24 Mei 2015**

**@Audit AMN FATETA**

**07.00 HTM : 25K**



## TERRARIUM BISA DIBAWA PULANG



**SPONSORED BY :**



**CP KAMILA 082298540342**

**MALUL 085642959897**

**MEDIA PARTNER :**





Eh ada macan



**SAYAAHHH....???**



**MACAN CISEWU**



**MACAN  
(MAMA CANTIK)**

# KEUNTUNGAN LIVE BIOTA

- **Mengaktifkan semua indera** → digunakan
- Siswa dpt melihat, mendengar, membau, memegang & **bahkan** jika mungkin merasakan live biota (Allers, 1996:83).
- Siswa dpt menyentuh objek scr real dan mjd lebih aktif dan berkonsentrasi

# Mengaktifkan Banyak Indera



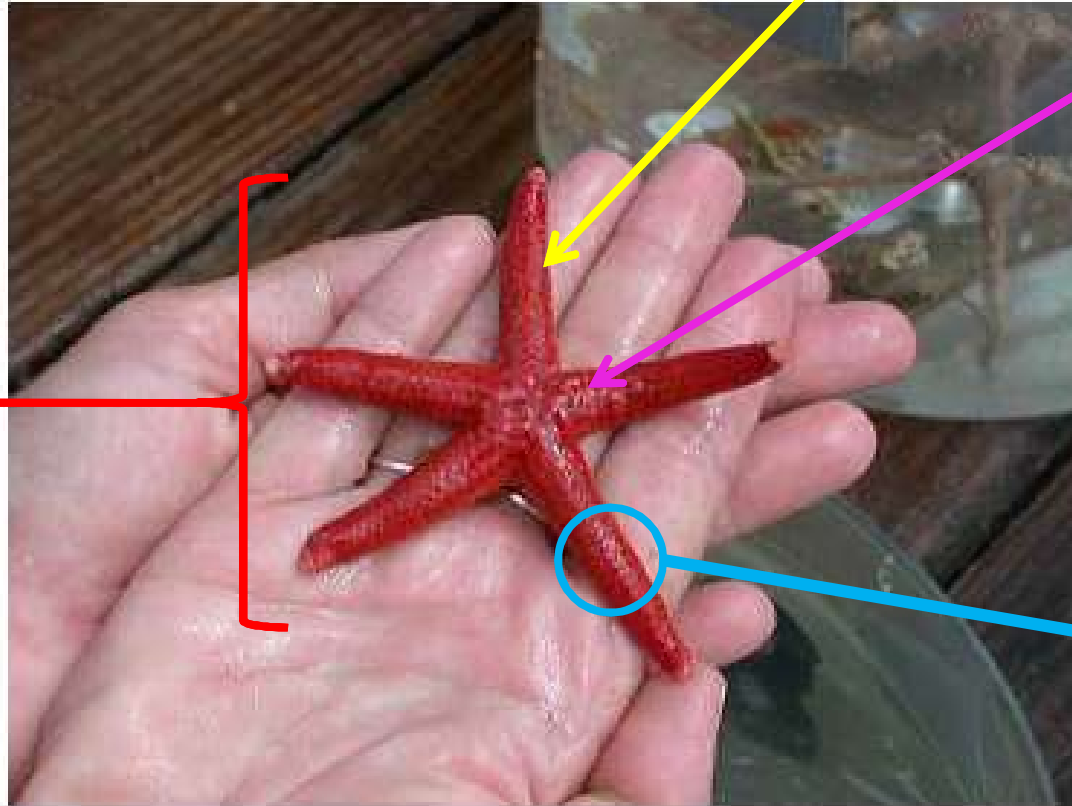
75 %

Bentuk

Warna

Ukuran

Gerakan  
(jika hidup)

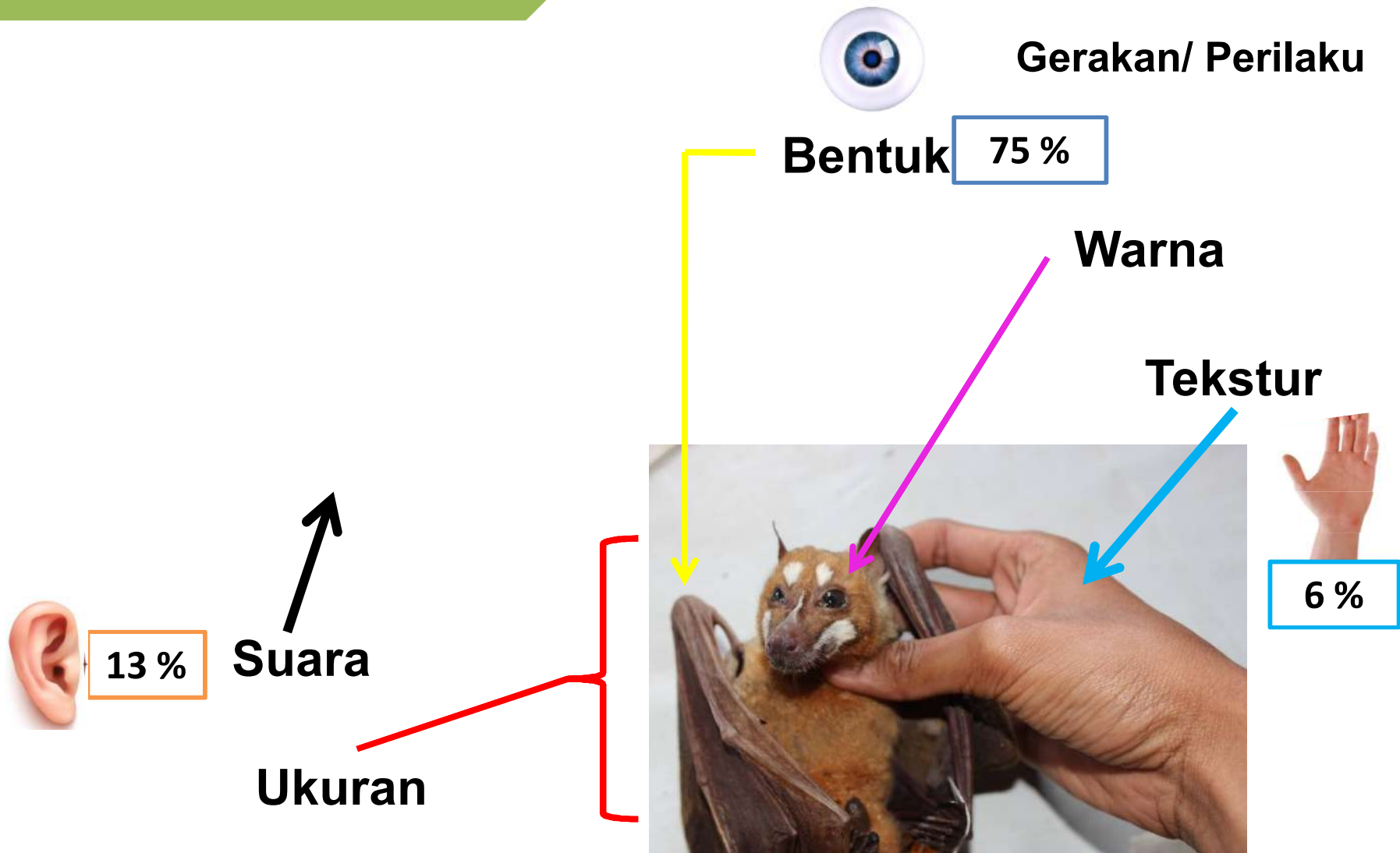


Tekstur

6 %

**MEDIA ASLI : INVERTEBRATA, BINTANG LAUT**

# Mengaktifkan Banyak Indera



**MEDIA ASLI : VERTEBRATA  
KELELAWAR/ CHIROPTERA**

**Gerakan/ Perilaku**

# Mengaktifkan Banyak Indera



Bentuk 75 %

Warna

Gerakan  
Perilaku



6 %

Tekstur

Ukuran



13 %

Suara



**MEDIA ASLI : VERTEBRATA**  
*Macaca fascicularis*

# Mengaktifkan Banyak Indera



75 %

Warna

Rasa??



6 %

Bau

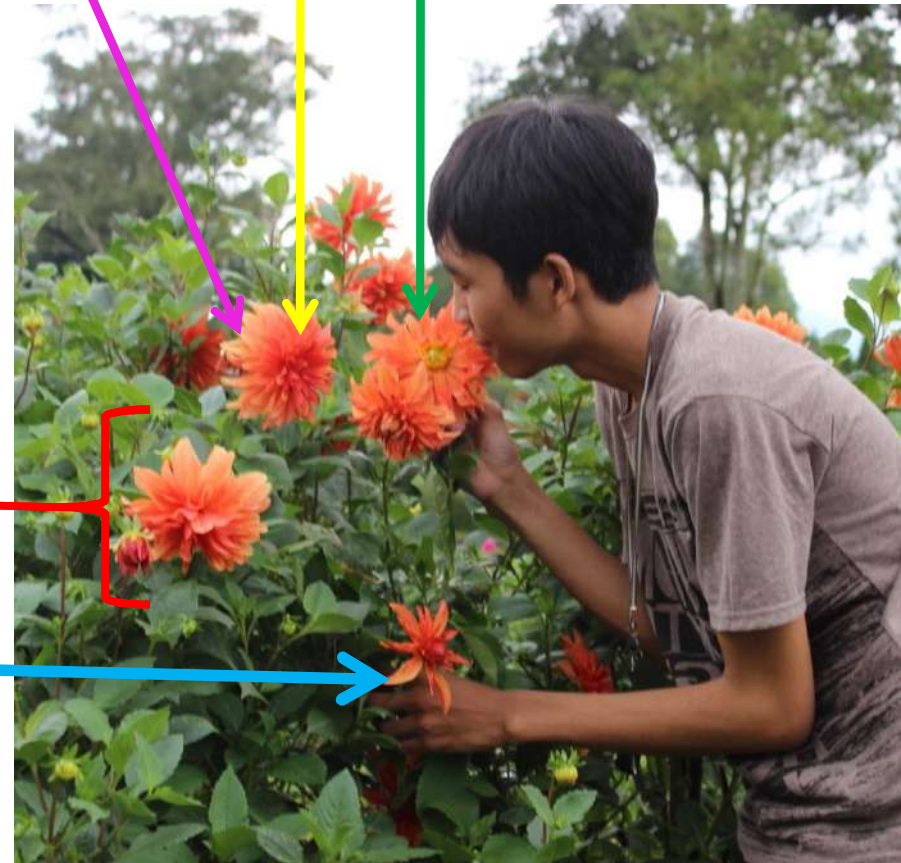
Bentuk



Ukuran

6 %

Tekstur



**MEDIA ASLI : PLANTAE  
BUNGA DAHLIA**

# KEKURANGAN LIVE BIOTA

- Live Biota tdk selalu trsedia
- Live Biota jg trhalang oleh kesejahteraan hewan & legal/ tdknya
- MAHAL utk merawat
- Mengunjungi suaka marga satwa & taman botani MAHAL

**Kekurangan bukan alasan untuk tidak menggunakan Live Biota**



# HARGA TICKET MASUK

Conservation  
Education  
and Fun

Jenis Ticket	Weekday	Weekend	Tourist	Fasilitas
 <b>Ticket Rusa</b>	<b>Rp. 65.000</b> (Usia 1-5 tahun) <b>Rp. 70.000</b> (Dewasa)	<b>Rp. 75.000</b> (Usia 1-5 tahun) <b>Rp. 80.000</b> (Dewasa)	<b>Rp. 120.000</b>	-Safari Adventure -10 Animal Show
 <b>Ticket Badak</b>	<b>Rp. 95.000</b> (Semua Usia)	<b>Rp. 115.000</b> (Semua Usia)	<b>Rp. 145.000</b>	-Safari Adventure -10 Animal Show -Safari Water World -23 Wahana Permainan 
 <b>Ticket Badak UNLIMITED</b>	<b>Rp. 110.000</b> (Semua Usia)	<b>Rp. 130.000</b> (Semua Usia)	<b>Rp. 160.000</b>	-Safari Adventure -10 Animal Show -Safari Water World (Gratis sewa Ban Renang) -23 Wahana Permainan (Unlimited) 

## KARCIS KEBUN RAYA BOGOR

DOMESTIK	: 15.000,-
MANCA NEGARA	: 26.000,-
MOBIL (RODA 4)	: 30.000,-
SEPEDA MOTOR	: 5.000,-
SEPEDA	: 5.000,-

\*) Termasuk Muzeum Zoologi, Retribusi Pemkot Bogor dan Asuransi



## CLASS 2 - PRESERVED MATERIAL

- Awetan hewan → embrio domba, kuda, etc.
- Siswa akan scr langsung berhubungan dgn **non-living material**
- Tdk se-efektif live biota, krn tdk semua indera digunakan





# KEUNTUNGAN PRESERVED MATERIAL

- It is the **real thing** and can help learners to understand exactly what is meant.
- It can be kept intact for very long periods of time
- It can be used over and over again

# KERUGIAN PRESERVED MATERIAL

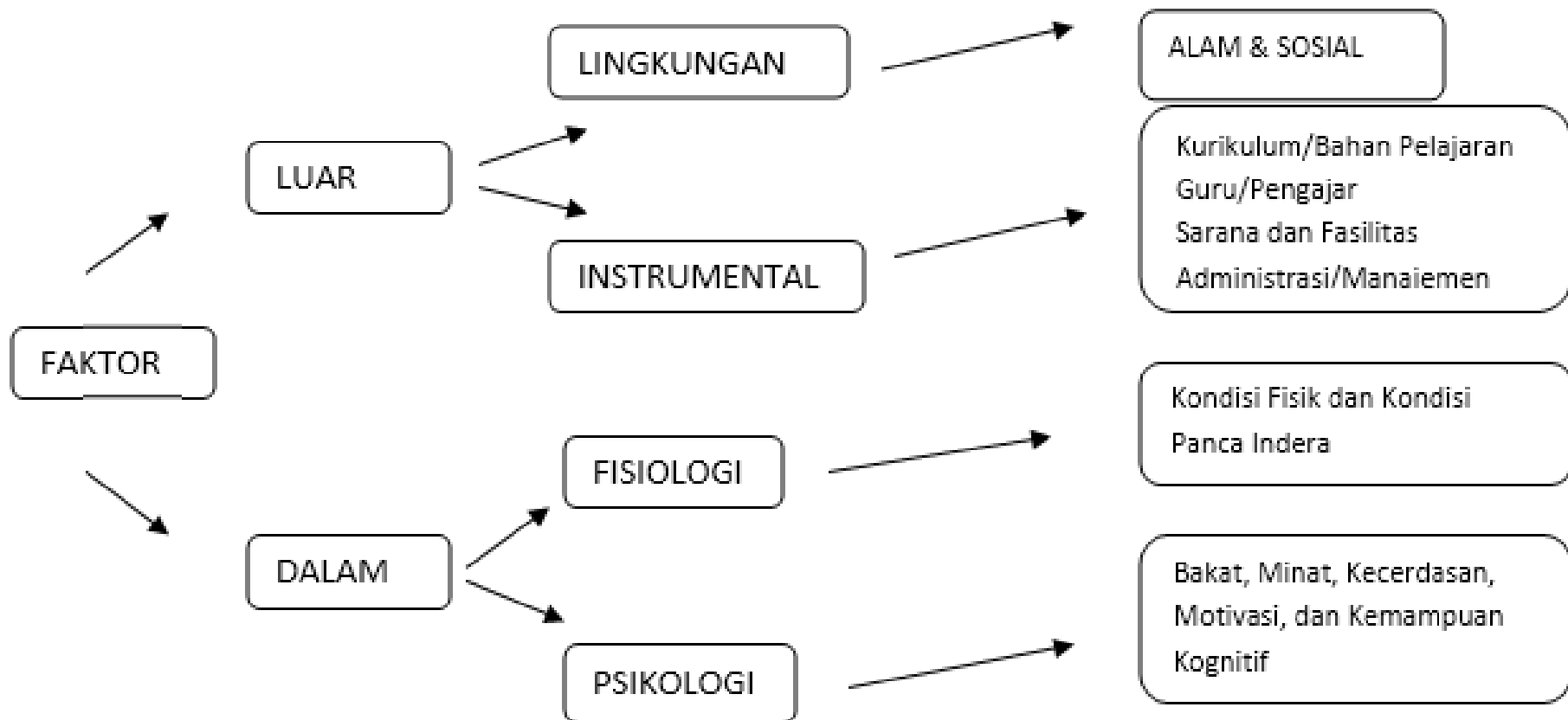
- Learners cannot see movement and the object **can loose** its colour, texture and form.
- Preserved animals or plants cannot always be removed from the solution it is kept in, **as** it can have an irritable effect on the learners' eyes or skin (Allers, 1996:86).
- Sometimes it is **very difficult or even impossible to obtain** exactly what is needed, eg. A human heart.

# MEDIA SEGAR TERMASUK??



# Peran Media dalam Pembelajaran Biologi

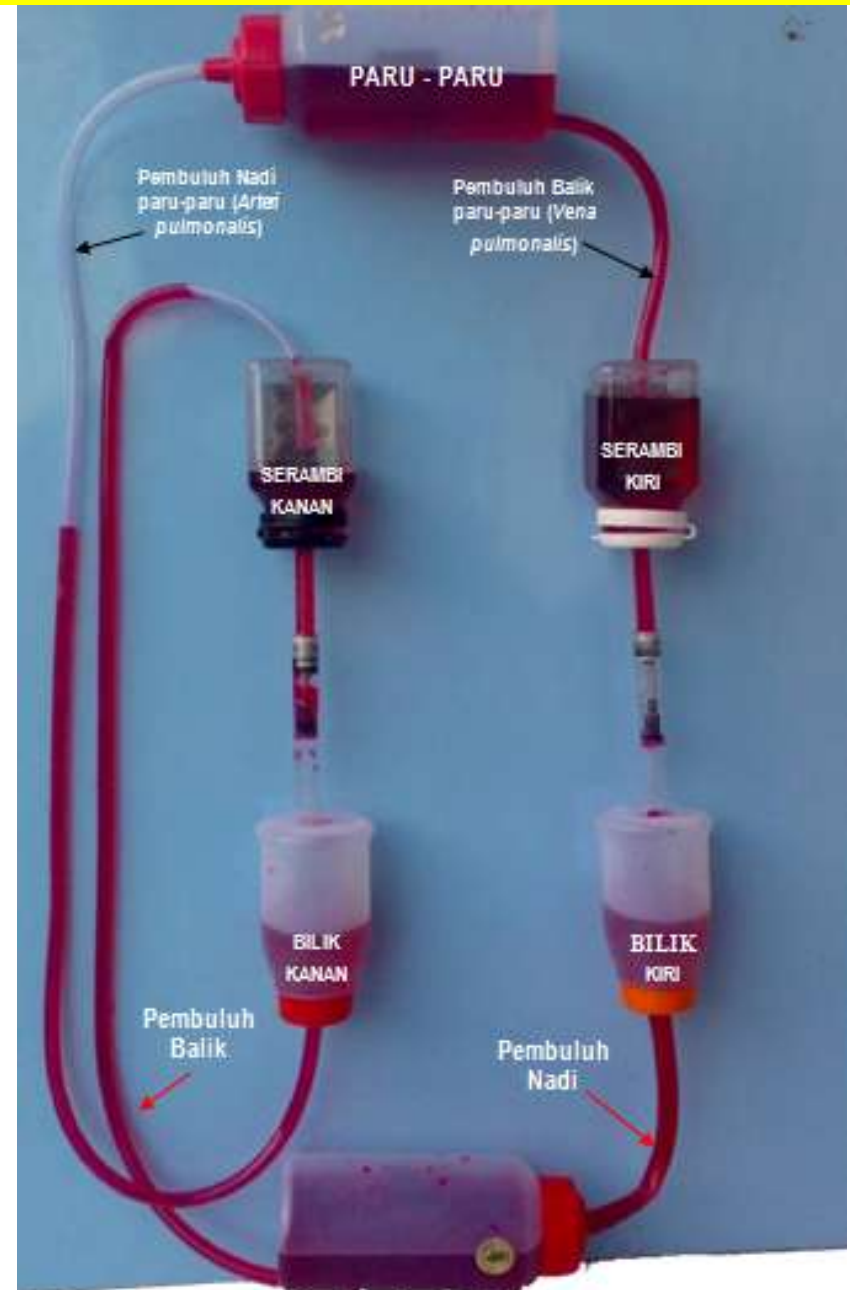
**Materi Biologi** : Fakta, konsep, prinsip, & proses dari gejala-gejala hidup, serta seluk beluk yg mempengaruhi hidup, interaksinya dgn lingkungan



# Pengembangan Media Pembelajaran Biologi



Media dari Limbah/ Barang Bekas





# Pengembangan Media Pembelajaran Biologi



**Media dari Limbah/ Barang Bekas**

Tabel. 2 Hasil Survai Media yang Dibutuhkan Siswa

Peringkat	Media yang dibutuhkan	Jumlah siswa yang memilih
1.	Media berbasis TIK	13
2.	Video	11
3.	Media Audio	6
4.	Media proyeksi	4
5.	Film	3
6.	Gambar / Charta	2
7.	Torso	1
8.	Foto	0
9.	Alat peraga	0



**50 orang guru Biologi SMP**



**Sedibeng-West District  
Afrika Selatan**

How often do you use the following teaching-learning media as a Science (Biology) teacher to present your lesson more effectively?

	Never	Seldom (once a month)	Often (once a week)	Every Lesson
1. Chalkboard	4 = 8 %	0 = 0 %	7 = 14 %	39 = 78%
2. Transparency	21 = 42 %	17 = 34 %	8 = 16 %	4 = 8 %
3. Video/ slides/ TV	25 = 50 %	0 = 0 %	20 = 40 %	5 = 10 %
4. Radio/ Cassette/ CD	38 = 76 %	10 = 20 %	1 = 2 %	1 = 2 %
5. Computer/ Internet	35 = 70 %	8 = 16 %	2 = 4 %	5 = 10 %
6. Textbooks	5 = 10 %	7 = 14 %	13 = 26 %	25 = 50 %
7. Flashcards/ Posters	11 = 22 %	10 = 20 %	17 = 34 %	12 = 24 %
8. Excursions	30 = 60 %	17 = 34 %	2 = 4 %	1 = 2 %
9. Models	14 = 28 %	15 = 30 %	16 = 32 %	5 = 10 %
10. Live Biota	41 = 82 %	4 = 8 %	4 = 8 %	1 = 2 %
11. Plays/ simulations	23 = 46 %	15 = 30 %	10 = 20 %	2 = 4 %
12. Experiments	13 = 26 %	12 = 24 %	22 = 44 %	3 = 6 %

Why are you using the specific teaching-learning media that you use often / in every lesson .

1. Cost saving	15 = 30 %
2. Time-saving	24 = 48 %
3. Easy available	40 = 80 %
4. Effective for learning	39 = 78 %
5. User friendly	26 = 52 %

Why are you not using those media that you have indicated as “never or seldom” more often.

1. Too expensive	20 = 40 %
2. Take too much time	12 = 24 %
3. Not available	45 = 90 %
4. Not effective	4 = 8 %
5. Don't feel comfortable with it	3 = 6 %

Which of the following teaching-learning media do you have available at your school ?

1. Chalkboard	50 = 100 %
2. Transparency	27 = 54 %
3. Video	34 = 68 %
4. Radio	18 = 36 %
5. Computer/ Internet	21 = 42 %
6. Textbooks	40 = 80 %
7. Flashcards/ Posters	28 = 56 %
8. Models	29 = 58 %
9. Live biota	7 = 14 %
10. Slides	11 = 22 %
11. TV	36 = 72 %
12. Cassettes	16 = 32 %
13. CD's	7 = 14 %

In what condition are the teaching-learning media at your school ?

1. Poor condition	8 = 16 %
2. Fair condition	28 = 56 %
3. Good condition	14 = 28 %
4. Not available	6 = 12 %

To what effect do you think teaching-learning media play a role in the effective presentation of a lesson ?

Large	Medium	Small
40 = 80 %	9 = 18 %	1 = 2 %

Which of the following teaching-learning media would you say is user-friendly (easy for the teacher to use) ?

1. Chalkboard	49 = 98 %
2. Transparency	42 = 84 %
3. Video/ slides/ TV	38 = 76 %
4. Radio/ Cassette/ CD	29 = 58 %
5. Computer/ Internet	27 = 54 %
6. Textbooks	36 = 72 %
7. Flashcards/ Posters	28 = 56 %
8. Excursions	25 = 50 %
9. Models	32 = 64 %
10. Live Biota	12 = 24 %
11. Plays/ simulations	16 = 32 %
12. Experiments	34 = 68 %



What do you as a teacher feel should be done about the teaching learning media problem in schools? Please indicate your opinion by ticking the appropriate block (s).

1. The Department should give more attention and money to solve the problem.	29 = 58 %
2. Schools should solve the problem internally.	11 = 22 %
3. An exchange program should be established amongst schools.	22 = 44 %
4. There should be a central institution to address this problem and aid teachers. (private initiative ?)	23 = 46 %
4. Teachers should be trained to create and make their own teaching- learning media (computer / arts / creativity courses)	38 = 76 %

THANK  
YOU

