



***BUBBLE* SEBAGAI MEDIA PEMBELAJARAN SAINS SEDERHANA
UNTUK MENINGKATKAN KEMAMPUAN KOGNITIF ANAK
USIA 4-5 TAHUN DI AREA SAINS DI TK PERTIWI 49 SEMARANG**

SKRIPSI

**Diajukan dalam Rangka Penyelesaian Studi Strata 1
untuk Memperoleh Gelar Sarjana Pendidikan**

Oleh:

Sri Setiyo Rahayu

NIM. 1601408029

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

PERSETUJUAN PEMBIMBING

Skripsi ini telah disetujui oleh Pembimbing untuk diajukan ke Sidang Panitia
Ujian Skripsi Fakultas Ilmu Pendidikan Universitas Negeri Semarang pada :

Hari :

Tanggal :

Pembimbing I

Pembimbing II

Dra. Lita Latiana, M.H.
NIP. 19630417 199903 2001

Edi Waluyo, M.Pd.
NIP. 19790425 200501 1001

Mengetahui,

Ketua Jurusan PG PAUD FIP UNNES

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link;

however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

HALAMAN PENGESAHAN

Skripsi ini telah dipertahankan dihadapan Sidang Panitia Ujian Skripsi Fakultas
Ilmu Pendidikan Pendidikan Guru Pendidikan Anak Usia Dini Universitas Negeri
Semarang pada :

Hari :

Tanggal :

Panitia Ujian Skripsi,

Ketua,

Sekretaris,

~~Drs. Budiono, M.S.~~
NIP. 19631209 198703 1002

~~Edi Waluyo, M.Pd.~~
NIP. 19790425 200501 1 001

Penguji I,

Dr. Sri Sularti Dewanti Handayani, M.Pd.
NIP.19570611 198403 2 001

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

PERNYATAAN

Yang bertanda tangan di bawah ini :

Nama Lengkap : Sri Setiyo Rahayu

NIM : 1601408029

Jurusan : PG PAUD

Fakultas : Ilmu Pendidikan

Universitas : Universitas Negeri Semarang (UNNES)

Menyatakan bahwa skripsi ini adalah hasil karya sendiri bukan jiplakan dari karya orang lain. Pendapat atau temuan dalam skripsi ini dikutip berdasarkan kode etik ilmiah.

Demikian pernyataan ini untuk dapat dipergunakan sebagaimana mestinya.

Semarang, 2013

Yang menyatakan,

Sri Setiyo Rahayu

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

MOTTO DAN PERSEMBAHAN

MOTTO

1. “Media pembelajaran sains sederhana sebagai tolok ukur keberhasilan anak dalam kemampuan berpikir kritis dan kreatif.”
2. ”Pengalaman di waktu kecil akan selalu diingat anak hingga dewasa, maka kenalkan anak dengan pembelajaran sains sederhana sedini mungkin sebagai bekal pengetahuannya di hari esok.”

PERSEMBAHAN

Dengan mengucap rasa syukur

Alhamdulillah kepada Allah SWT, skripsi

ini aku persembahkan untuk :

1. Ibu dan Ayah tercinta yang telah
memberikan doa, cinta, kasih sayang,
semangat dan motivasi.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

ABSTRAK

Setiyo Rahayu, Sri. 2013. “*Bubble* sebagai Media Pembelajaran Sains Sederhana untuk Meningkatkan Kemampuan Kognitif Anak Usia 4-5 Tahun di Area Sains di TK Pertiwi 49 Semarang.” Skripsi, Jurusan Pendidikan Guru Pendidikan Anak Usia Dini, Fakultas Ilmu Pendidikan, Universitas Negeri Semarang. Pembimbing : I Dra. Lita Latiana, S.H., M.H., Pembimbing II: Edi Waluyo, M.Pd.

Kata Kunci: Pembelajaran sains, media *bubble*, kemampuan kognitif

Pembelajaran sains di TK tetap ada dan terpadu dengan bidang lainnya dalam setiap tema. Pengenalan dan pembelajaran sains yang dilaksanakan di TK bersifat *integrated learning*/pembelajaran terintegrasi, sehingga pembelajaran sains terintegrasi dengan pengembangan lainnya. Pengembangan pembelajaran sains pada anak termasuk bidang pengembangan lainnya memiliki peran yang sangat penting dalam membantu meletakkan dasar kemampuan dan pembentukan sumber daya manusia yang diharapkan. Berbagai gejala alam seperti hujan, angin, petir, kebakaran, hewan yang beranak, tumbuhan yang berbuah juga menarik perhatian anak. Objek-objek tersebut dipelajari melalui metode ilmiah yang bagi anak TK perlu disederhanakan. Observasi, eksplorasi, dan eksperimentasi sederhana dapat dilakukan anak. Anak dapat melakukan proses sains lainnya seperti melakukan pencampuran warna dasar, pengukuran, melakukan klasifikasi, dan sebagainya. Produk sains untuk anak TK lebih dominan berupa pengetahuan tentang fakta-fakta dan gejala peristiwa tentang benda-benda alam.

Adapun tujuan penelitian ini yaitu: Untuk mengetahui cara dan hasil penggunaan media *bubble* dalam meningkatkan kemampuan kognitif anak usia 4-5 tahun di TK Pertiwi 49 Semarang. Penelitian ini dilakukan di TK Pertiwi 49 Semarang, dengan mengambil sampel seluruh jumlah anak didik 24 anak kelompok A. Tahap-tahap penelitian yang dilakukan antara lain penelitian pra penelitian, terjun ke lapangan, dan tahap analisis data. Metode pengumpulan data yang digunakan observasi dan dokumentasi.

Sesuai dengan hasil penelitian yang telah dilakukan, yaitu cara

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

KATA PENGANTAR

Segala puji bagi Allah SWT yang senantiasa melimpahkan rahmat, hidayah serta inayahnya, sehingga penulis dapat menyelesaikan skripsi dengan judul *“Bubble sebagai Media Pembelajaran Sains Sederhana untuk Meningkatkan Kemampuan Kognitif Anak Usia 4-5 Tahun di Area Sains di TK Pertiwi 49 Semarang”*. Keberhasilan penulis dalam menyelesaikan skripsi ini tidak lepas dari bimbingan dan bantuan berbagai pihak, baik secara langsung maupun tak langsung.

Dalam kesempatan ini perkenankanlah penulis mengucapkan terima kasih kepada :

1. Drs. Harjono, M.Pd., selaku Dekan Fakultas Ilmu Pendidikan Universitas Negeri Semarang, yang telah memberikan izin untuk penelitian.
2. Edi Waluyo, M.Pd., selaku Ketua Jurusan Pendidikan Guru Pendidikan Anak Usia Dini, FIP Universitas Negeri Semarang yang telah memberikan berbagai kemudahan dalam penelitian ini.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

6. Dewan Guru TK Pertiwi 49 Semarang yang ikut membantu dalam kegiatan penelitian.
7. Semua pihak yang tidak dapat penulis sebutkan satu persatu yang telah banyak membantu dalam penulisan skripsi ini.

Penulis berharap semoga skripsi ini dapat berguna bagi para pembaca dan dapat memberikan sumbangan pemikiran bagi kemajuan dunia pendidikan pada umumnya, dan dunia pendidikan anak usia dini pada khususnya.

Semarang, 2013

Penulis

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

DAFTAR ISI

HALAMAN JUDUL i

HALAMAN PERSETUJUAN PEMBIMBING ii

HALAMAN PENGESAHAN KELULUSAN iii

HALAMAN PERNYATAAN..... iv

MOTTO DAN PERSEMBAHAN..... v

ABSTRAK vi

KATA PENGANTAR..... vii

DAFTAR ISI..... ix

DAFTAR TABEL xii

DAFTAR GRAFIK xiv

DAFTAR GAMBAR..... xv

DAFTAR LAMPIRAN xvi

BAB I PENDAHULUAN..... 1

1.1 Latar Belakang 1

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

2.1.2. Nilai dan Manfaat Media Pembelajaran.....

15

2.1.3 Klasifikasi dan Karakteristik Media Pembelajaran

18

2.1.4 Kriteria Pemilihan Media.....

24

2.2. Pengertian Sains

26

2.3. Pendekatan Pembelajaran Sains di TK

28

2.4. *Bubble* sebagai Media Pembelajaran Sains di TK

30

2.5. Hakikat Anak Usia Dini

35

2.5.1 Karakteristik Anak Usia Dini.....

38

2.5.2 Perkembangan Anak Usia 4-5 Tahun

40

2.5.3 Perkembangan Kognitif Anak Usia Dini

43

2.6. Model Pembelajaran Area di TK

61

2.7. Kerangka Berfikir.....

63

BAB 3 METODELOGI PENELITIAN

64

3.1 Pendekatan Penelitian

64

3.2. Desain Penelitian.....

61

3.3. Lokasi Penelitian

65

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4.1.2 Cara Penggunaan Media *Bubble* sebagai Media Pembelajaran Sains Sederhana..... 70

4.1.3 Kesimpulan Kumulatif dari Proses Pembelajaran dengan *Bubble* sebagai Media Pembelajaran Sains Sederhana..... 97

4.1.4 Hasil Pengamatan Menggunakan Ceklist..... 98

4.1.4.1. Minggu Pertama 99

4.1.4.2 Minggu Kedua..... 104

4.1.5 Hasil Penggunaan Media *Bubble* sebagai Media Pembelajaran Sains Sederhana di TK 109

4.1.6 Hasil Kemampuan Kognitif Anak Usia 4-5 Tahun Di Area Sains 114

BAB V PENUTUP..... 119

5.1 Simpulan 119

5.2 Saran..... 122

DAFTAR PUSTAKA 123

LAMPIRAN..... 126

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

DAFTAR TABEL

	Halaman
Tabel 3.1 Interval Skor.....	68
Tabel 4.1 Perolehan Skor pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Kelompok <i>Posttest</i> (Anak didik sesudah mendapat Media <i>Bubble</i>).....	99
Tabel. 4.2 Distribusi Frekuensi pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Kelompok <i>Posttest</i> (Anak didik sesudah mendapat Media <i>Bubble</i>).....	100
Tabel 4.3 Perolehan Skor pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Kelompok <i>Posttest</i> (Anak didik sesudah mendapat Media <i>Bubble</i>).....	102
Tabel. 4.4 Distribusi Frekuensi pada Aspek Perkembangan untuk Indikator	

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Tabel. 4.6 Distribusi Frekuensi Skor pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Kelompok *Pretest* (Anak didik sebelum mendapat Media *Bubble*) 106

Tabel 4.7 Perolehan Skor pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Dimensi Konsep Bentuk, Warna, Ukuran dan Pola Kelompok *Pretest* (Anak didik sebelum mendapat Media *Bubble*)..... 107

Tabel. 4.8 Distribusi Frekuensi Skor pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Dimensi Konsep Bentuk, Warna, Ukuran Dan Pola Kelompok *Pretest* (Anak didik sebelum mendapat Media *Bubble*)..... 108

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

DAFTAR GRAFIK

Grafik 4.1 Perbandingan Perolehan Skor Kemampuan Kognitif Siswa

Kelompok Posttest dan Kelompok Pretest Minggu Pertama

115

Grafik 4.2 Perbandingan Perolehan Skor Kemampuan Kognitif Siswa

Kelompok *Posttest* dan Kelompok *Pretest* Minggu Kedua.....

117

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

DAFTAR GAMBAR

	Halaman
Gambar 4.1 Guru memberi penjelasan kepada anak tentang warna dasar (merah, kuning dan biru).....	72
Gambar 4.2 Anak menuang warna dasar (merah, kuning dan biru) ke dalam gelas aqua.....	73
Gambar 4.3 Anak menakar deterjen Rinso.....	73
Gambar 4.4 Anak meniup air deterjen Rinso sehingga tercipta gelembung ..	74
Gambar 4.5 Lomba membawa piring di atas kepala	78
Gambar 4.6 Anak meniup gelembung dengan warna merah dan hijau.....	85
Gambar 4.7 Anak mencampur warna merah dan kuning	88
Gambar 4.8 Anak membuat sate buah dengan pola tertentu.....	88
Gambar 4.9 Anak meniup air sampo Sunsilk sehingga tercipta <i>bubble</i>	91
Gambar 4.10 Anak menutup gelas aqua dengan kertas HVS	92
Gambar 4.11 Hasil lukisan <i>bubble</i> dengan warna ungu, hijau dan orange.....	92

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

DAFTAR LAMPIRAN

	Halaman
Lampiran 1 Surat Keterangan Penelitian	126
Lampiran 2 Pedoman Observasi.....	127
Lampiran 3 Format Penugasan dan Eksperimen.....	130
Lampiran 4 Format Kegiatan Percakapan	137
Lampiran 5 Format Kegiatan Hasil Karya.....	141
Lampiran 6 Daftar Nama Anak.....	142
Lampiran 7 Jadwal Kegiatan Pembelajaran Kelompok A	143
Lampiran 8 Rencana Kegiatan Mingguan.....	149
Lampiran 9 Lembar Hasil Evaluasi Minggu Pertama.....	153
Lampiran 10 Lembar Hasil Evaluasi Minggu Kedua.....	156
Lampiran 11 Rencana Kegiatan Harian	158
Lampiran 12 Lembar Pengamatan Data.....	182
Lampiran 13 Hasil Dokumentasi	203

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link;

however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

BAB 1

PENDAHULUAN

1.1. Latar Belakang

Masa kanak-kanak merupakan suatu periode pada saat individu mengalami perkembangan yang sangat pesat. Banyak ahli menyebut periode ini sebagai *golden age* (masa emas) dalam kehidupan seseorang. Pada masa ini, semua aspek kecerdasan anak dapat dikembangkan dengan baik dan dapat dengan mudah menerima apa yang disampaikan orang lain. Pada masa ini pula terjadi pertumbuhan fisik yang sangat pesat. Mengingat betapa pentingnya periode kanak-kanak bagi kehidupan seseorang inilah, stimulasi yang tepat sangat diperlukan. Stimulasi yang tepat ini akan membantu anak-anak tumbuh, berkembang dan belajar secara maksimal. Hal ini sesuai dengan Undang-Undang Nomor 23 Tahun 2002 tentang Perlindungan Anak yang menyatakan bahwa setiap anak berhak untuk hidup, tumbuh, berkembang dan berpartisipasi secara wajar sesuai dengan harkat dan martabat kemanusiaan, serta mendapat perlindungan dari kekerasan dan diskriminasi.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

menjadi 80%. Para peneliti menemukan pula bahwa kemampuan belajar manusia 50% ditentukan dalam empat tahun pertama, 30% kemampuan yang lain dicapai sebelum usia delapan tahun.

Menurut Piaget bahwa siswa Taman Kanak-Kanak berada pada masa pra operasional. Pada fase ini anak mulai menyadari bahwa pemahaman tentang benda-benda di sekitarnya yang dapat dilakukan melalui kegiatan yang bersifat simbolik. Fase ini memberikan andil yang besar bagi perkembangan kognitif anak.

Pendidikan anak TK pada hakikatnya adalah pendidikan untuk memfasilitasi pertumbuhan dan perkembangan anak secara menyeluruh atau menekankan pada pengembangan seluruh dimensi perkembangan anak yang meliputi kognitif, sosial, emosi, fisik dan motorik.

Secara psikologis anak berkembang secara holistik atau menyeluruh, artinya terdapat kaitan yang sangat erat antara aspek perkembangan yang satu dengan aspek perkembangan yang lainnya.

Mata pelajaran sains memang tidak tercantum di dalam kurikulum TK,

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dalam membantu meletakkan dasar kemampuan dan pembentukan sumber daya manusia yang diharapkan.

Berbagai gejala alam seperti hujan, angin, petir, kebakaran, hewan yang beranak, tumbuhan yang berbuah juga menarik bagi anak. Objek-objek tersebut dipelajari melalui metode ilmiah yang bagi anak TK perlu disederhanakan. Observasi, eksplorasi, dan eksperimentasi sederhana dapat dilakukan anak. Anak dapat melakukan proses sains lainnya seperti melakukan pencampuran warna dasar, pengukuran, melakukan klasifikasi, dan sebagainya. Produk sains untuk anak TK lebih dominan berupa pengetahuan tentang fakta-fakta dan gejala peristiwa tentang benda-benda alam. (diunduh dari <http://www.pengenalan.sains.unik.ac.id/2012/05/30/produk-sains-untuk-anak-tk/> 30 Mei 2012).

Kegiatan pembelajaran sains yang terpenting bagi anak adalah anak mengerti proses sains, dari proses sains melahirkan pengalaman belajar dan pembentukan sikap secara simultan dan terpadu. Kegiatan pembelajaran sains yang cocok untuk pengembangan pembelajaran sains adalah dengan penerapan keterampilan proses pada setiap tahapnya.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Berhasil tidaknya proses dan hasil suatu bidang pengembangan (terutama sains) bagi anak usia dini dipengaruhi oleh beberapa faktor. Di antara faktor yang fundamental yang turut berpengaruh adalah para pengajar dan pendidik sains. Agar pembelajaran sains pada anak berjalan secara optimal, hendaknya orang-orang yang terlibat dalam pendidikan sains betul-betul memahami hakekat sains secara benar, dan memahami hakekat anak secara benar. Pengembangan pembelajaran sains pada anak usia dini, memiliki peranan yang sangat penting dalam membantu meletakkan dasar kemampuan dan pembentukkan sumber daya manusia yang diharapkan. Kesadaran pentingnya pembekalan sains pada anak akan semakin tinggi apabila menyadari bahwa kita hidup dalam dunia yang dinamis, berkembang dan berubah secara terus-menerus bahkan makin menuju masa depan, semakin memerlukan sains.

Hakekat sains perlu dikaji, dipelajari dan ditekuni, anak-anak sebagai generasi yang dipersiapkan untuk mengisi masa depan yang diduga akan semakin rumit, berat dan banyak problemnya perlu dibekali penguasaan sains yang memadai, tepat, bermakna dan fungsional. Secara umum pembelajaran sains di

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

depan yang sangat menantang, menuntut semakin strategis bahwa pembekalan sains bagi anak usia dini menjadi mutlak, sehingga sains pada diri anak muncul sebagai suatu cara untuk mencari kebenaran dalam kehidupannya kelak.

(http://www.altaf.blogspot.com/2009/1/artikel._Pengembangan_Pembelajaran_Sains_Anak_Usia_TK-B_Melalui_Seni_Rupa.html.)

Menurut Yulianti (2010:18) sains adalah produk. Sebagai produk, sains adalah sebatang tubuh pengetahuan yang terorganisir dengan baik mengenai dunia fisik alami. Sebagai proses, sains yang mencakup menelusuri, mengamati, dan melakukan percobaan, sangatlah penting agar anak dapat berpartisipasi ke dalam proses ilmiah, karena keterampilan yang mereka dapatkan dapat dibawa ke perkembangan lainnya dan akan bermanfaat selama hidupnya.

Permasalahan yang ada di lapangan dari hasil observasi awal di TK Pertiwi 49 Semarang adalah bahwa pembelajaran sains dengan keterampilan proses masih rendah, terutama pada proses dan hasil belajar anak. Kesulitan pada keterampilan proses sains ini salah satu bersumber dari guru, masih kurang memanfaatkan media yang ada dalam pembelajaran sains, guru kurang

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

berjalan dengan baik dan produktif apabila guru memiliki kemampuan dalam menciptakan suasana belajar siswa yang menyenangkan. Guru harus memiliki kemampuan dalam berkomunikasi dalam menyampaikan bahan ajar/tema dengan menggunakan media dan sumber belajar secara terprogram sejalan dengan kompetensi pembelajarannya

Untuk mendapatkan hasil pendidikan yang baik, sarana di TK memegang peranan penting dalam kegiatan belajar mengajar. Kegiatan belajar mengajar pada dasarnya merupakan proses yang sistematis dan terdiri dari berbagai komponen, seperti bahan kegiatan, prosedur didaktik (penggunaan metode), pengelompokan anak didik, dan media pengajaran yang berupa sarana/alat peraga yang digunakan.

Oleh sebab itu TK tanpa sarana yang memadai tidak berfungsi sebagai lembaga pendidikan yang baik, karena kegiatan belajar mengajari TK dilakukan melalui prinsip “bermain sambil belajar” atau belajar seraya bermain. Bermain merupakan pendekatan dalam melaksanakan kegiatan pembelajaran anak usia dini. Upaya-upaya pendidikan yang diberikan oleh pendidik hendaknya dilakukan dalam situasi yang menyenangkan. Menggunakan strategi, metode, materi/bahan,

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Disadari bahwa guru merupakan garda terdepan pendidikan yang langsung berhubungan dengan anak didik. Sebagai mediator seorang guru dituntut memiliki pengetahuan dan pemahaman yang cukup tentang media pendidikan sebagai alat komunikasi dalam proses pembelajaran. Guru harus terampil memilih, menggunakan dan mengolah media pendidikan serta mampu menjadi perantara atau (media) dalam hubungan antara siswa dalam proses bermain sambil belajar sains. Sebagai mediator seorang guru hendaknya mampu mengolah/membuat sumber belajar yang berguna dan dapat menunjang tercapainya tujuan dan proses belajar sains.

Pembelajaran sains di TK perlu didukung dengan dengan berbagai alat atau media pembelajaran yang kaya, apakah itu berupa alat peraga, alat bermain, buku atau berupa media pembelajaran lainnya. Dewasa ini, alat dan media pembelajaran yang dapat digunakan semakin kaya dan bervariasi, tidak saja terbatas pada alat-alat atau benda-benda langsung, tapi juga bisa berupa program mainan yang ada dikomputer atau berupa film. Disamping dapat memilih dan memanfaatkan alat-alat atau media-media yang sudah tersedia atau diproduksi

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

yang kondusif dan menyenangkan sesuai dengan karakteristik anak TK yang pada dasarnya masih senang bermain.

Penggunaan media yang baik tentu saja tidak lepas dari kemampuan dan keahlian guru dalam mendesain, membuat dan mengembangkan media pembelajaran. Guru TK dituntut untuk berkreativitas untuk mengatasi hambatan yang dihadapi dalam proses pembelajaran terutama yang berkaitan dengan penyampaian pesan yang sulit dimengerti oleh peserta didik jika di terangkan dengan penjelasan verbal semata.

Salah satu langkah strategis untuk dapat membekali anak secara optimal, harus didahului dengan memahami karakteristik dan tujuan pendidikan dan pembelajaran yang akan diterapkan pada anak usia dini termasuk dalam bidang pengembangan sains untuk anak usia dini. Dengan memahami lingkup dan tujuan pendidikan sains tersebut akan membantu para pengajar atau orang dewasa lainnya dalam penguasaan program-program pembelajaran sains untuk anak usia dini yang dianggap tepat. Untuk dapat menyelenggarakan pembelajaran sains yang tepat dipengaruhi oleh berbagai faktor, faktor yang sangat fundamental

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Meningkatkan Kemampuan Kognitif Anak Usia 4-5 Tahun di Area Sains di TK Pertiwi 49 Semarang.

1.2. Rumusan Masalah

Dari latar belakang di atas maka masalah yang timbul adalah :

- 1.2.1. Bagaimana cara pembuatan *Bubble* sebagai media pembelajaran sains sederhana untuk meningkatkan kemampuan kognitif anak usia 4-5 tahun di area sains di TK Pertiwi 49 Semarang?
- 1.2.2. Apa saja hasil penggunaan *Bubble* sebagai media pembelajaran sains sederhana untuk meningkatkan kemampuan kognitif anak usia 4-5 tahun di area sains di TK Pertiwi 49 Semarang?

1.3. Tujuan Penelitian

Suatu penelitian yang hendak dilakukan pasti mempunyai tujuan sasaran yang ingin dicapai. Bertitik tolak dari rumusan masalah yang dikemukakan di atas maka penelitian ini mempunyai tujuan :

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

1.4. Manfaat Penelitian

Manfaat dari penelitian ini yaitu:

1.4.1 Manfaat atau Kegunaan Teoritis

Diharapkan dapat menambah khazanah ilmu pengetahuan dan dapat dijadikan sebagai salah satu rujukan dalam mengkaji aspek-aspek yang terkait dengan penelitian Studi Eksperimen *Bubble* sebagai Media Pembelajaran Sains Sederhana untuk Meningkatkan Kemampuan Kognitif Anak Usia 4-5 tahun di Area Sains di TK Pertiwi 49 Semarang.

1.4.2 Manfaat atau Kegunaan Praktis

1.4.2.1 Bagi Penulis

Dapat mengetahui penggunaan media *bubble* sebagai media pembelajaran sains pada TK Pertiwi 49 Semarang.

1.4.2.2 Bagi dunia pendidikan

Penelitian ini dapat dijadikan sebagai bentuk kontribusi dan upaya untuk memacu guru/pendidik dalam pelaksanaa pembelajaran terutama dalam penggunaan media *bubble* dalam meningkatkan kemampuan dasar kognitif anak.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

strategi ilmiah yang digunakan untuk mengungkapkan permasalahan penelitian sehingga hasil penelitian dapat dipertanggung jawabkan secara ilmiah. Bab IV membahas hasil penelitian untuk membuktikan permasalahan yang dirumuskan dan merupakan jawaban terhadap permasalahan yang dirumuskan, terdiri atas hasil dan pembahasan penelitian. Bab V mencakup simpulan dan saran. Simpulan merupakan pernyataan singkat yang memberikan jawaban atas permasalahan yang diangkat kedalam penelitian berguna untuk memudahkan pembaca dalam mengetahui hasil penelitian dan masukan bagi pihak terkait sejalan dengan temuan yang diperoleh dalam penelitian serta memungkinkan untuk dilaksanakan oleh pihak-pihak tertentu.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

BAB 2

KAJIAN PUSTAKA

2.1. Media Pembelajaran

2.1.1. Pengertian Media Pembelajaran

Dalam dunia pendidikan guru memang bukan satu-satunya sumber belajar, walaupun tugas, peranan dan fungsinya dalam proses belajar mengajar sangat penting. Dengan berkembangnya ilmu pengetahuan dan teknologi dan perkembangan masyarakat serta budaya pada umumnya, berkembang pula tugas dan peranan guru, seiring dengan berkembangnya jumlah anak yang memerlukan pendidikan. Sumber belajar yang dapat dilihat dalam lingkungan pendidikan selain guru misalnya buku, radio, majalah, film, bingkai, video, dengan atau tanpa bantuan alat-alat seperti proyektor dan pesawat radio/video. Bahan dan alat yang dikenal dengan istilah *software* dan *hardware* ini adalah media pendidikan.

Menurut Arief S. Sadiman (2008:11) bahwa proses belajar mengajar pada hakikatnya adalah proses komunikasi, yaitu proses penyampaian pesan dari

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

baik oleh anak maka dalam proses komunikasi pembelajaran tersebut diperlukan wahan penyalur pesan yang disebut media pembelajaran. Untuk lebih memperjelas pemahaman mengenai pembelajaran sebagai proses komunikasi, dapat dilihat pada gambar berikut ini :



Gambar 1. Proses Komunikasi Pembelajaran

Peran media dalam komunikasi pembelajaran di Taman Kanak-kanak semakin penting artinya mengingat perkembangan anak pada saat itu berada pada masa konkret. Oleh karena itu, salah satu prinsip pembelajaran di TK adalah kekonkretan, artinya bahwa anak diharapkan dapat mempelajari sesuatu secara nyata. Prinsip kekonkritan tersebut mengisyaratkan perlunya digunakan media sebagai penyampai pesan dari guru kepada anak didik agar pesan/informasi tersebut dapat diterima atau diserap anak dengan baik.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Menurut Arief S. Sadiman (2008:6), kata media berasal dari bahasa Latin dan merupakan bentuk jamak dari kata *medium* yang secara harfiah perantara atau pengantar. Jadi, media adalah segala sesuatu yang dapat digunakan untuk menyalurkann pesan dari pengirim ke penerima sehingga dapat merangsang pikiran, perasaan, perhatian dan minat serta perhatian siswa sedemikian rupa sehingga proses belajar terjadi.

Dalam situasi pembelajaran di TK terdapat pesan-pesan yang harus dikomunikasikan. Pesan tersebut biasanya merupakan isi dari tema atau topik pembelajaran. Pesan-pesan tersebut disampaikan oleh guru kepada anak melalui suatu media dengan menggunakan prosedur pembelajaran tertentu yang disebut metode.

Menurut Oemar Hamalik (1994:12) dalam Edi Waluyo media pendidikan adalah alat, metode dan teknik yang digunakan dalam rangka lebih mengefektifkan komunikasi dan interaksi guru dan siswa dalam proses pendidikan dan pengajaran di sekolah.

Setelah mencermati beberapa pengertian di atas, bahwa media

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Dari uraian tersebut di atas mengenai definisi media pembelajaran dapat disimpulkan sebagai berikut :

1. Media merupakan peralatan yang digunakan dalam peristiwa komunikasi dengan tujuan membuat komunikasi lebih efektif.
2. Media pembelajaran merupakan peralatan pembawa pesan atau wahana dari pesan yang oleh pemberi pesan (guru) untuk diteruskan kepada penerima pesan (anak didik). Pesan yang disampaikan adalah isi pembelajaran dalam bentuk tema/topik pembelajaran

Media pembelajaran adalah segala sesuatu yang digunakan atau disediakan oleh guru dimana penggunaannya diintegrasikan ke dalam tujuan dan isi pembelajaran sehingga dapat membantu dalam meningkatkan kualitas kegiatan pembelajaran serta mencapai kompetensi pembelajarannya.

Adapun media pembelajaran yang digunakan guru TK untuk menyampaikan maksud dari tema yang dipelajari pada waktu itu. Dengan penggunaan media dalam proses pembelajaran di TK, anak-anak akan lebih tertarik dalam mengikuti kegiatan belajar melalui bermain.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dengan komponen lainnya dalam rangka menciptakan situasi belajar yang diharapkan. Tanpa media maka proses pembelajaran tidak akan berjalan dengan efektif.

Keefektifan proses pembelajaran akan terjadi apabila ada komunikasi antara sumber pesan (dalam hal ini guru TK) dengan penerima pesan (dalam hal ini anak). Komunikasi tersebut efektif ditandai dengan adanya *area of experience* atau daerah pengalaman yang sama antara penyalur pesan dengan penerima pesan.

Menurut Arief S. Sadiman (2008:17) bahwa media pembelajaran memiliki nilai-nilai dalam mengoptimalkan pencapaian hasil belajar di TK. Nilai-nilai media pembelajaran diantaranya adalah sebagai berikut ini :

1. Mengkonkretkan konsep-konsep yang abstrak.

Konsep-konsep yang dirasakan masih bersifat abstrak dan sulit dijelaskan secara langsung kepada anak bisa dikonkretkan atau disederhanakan melalui pemanfaatan media pembelajaran. Misalnya untuk menjelaskan tentang sistem peredaran darah manusia, arus listrik, berhembusnya angin, dan sebagainya bisa menggunakan media gambar atau

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Beruang, gajah, jerapah, atau bahkan hewan-hewan yang sudah punah seperti dinosaurus, dan sebagainya.

3. Menampilkan objek yang terlalu besar. Melalui media, guru dapat menyampaikan gambaran mengenai sebuah kapal laut, pesawat udara, pasar, candi, dan sebagainya di depan kelas. Atau menampilkan objek-objek yang terlalu kecil, seperti bakteri, virus, semut, nyamuk, dan sebagainya. Contoh, guru menggunakan miniatur pesawat, kapal dan kereta api untuk mengenalkan macam-macam kendaraan kepada anak.
4. Memperlihatkan gerakan yang terlalu cepat. Dengan menggunakan media film (*slow motion*) guru bisa memperlihatkan lintasan peluru, melesatnya anak panah, atau memperlihatkan proses suatu ledakan. Demikian juga gerakan-gerakan yang terlalu lambat. Contoh, guru menggunakan media kecambah yang ditaruh diatas kertas basah untuk mengetahui proses pertumbuhan kecambah sehingga dapat diamati dalam waktu singkat.

Selain keempat nilai media pembelajaran di atas, masih terdapat nilai-nilai yang lainnya dari pemanfaatan media pembelajaran, yaitu sebagai berikut ini :

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Manfaat dari media juga diungkapkan oleh Nana Sudjana (2010:2), ia mengungkapkan manfaat media dalam proses belajar siswa antara lain :

1. Pengajaran akan lebih menarik perhatian siswa sehingga dapat menumbuhkan motivasi belajar.
2. Bahan pengajaran akan lebih jelas maknanya sehingga dapat lebih dipahami oleh para siswa, dan memungkinkan siswa menguasai tujuan pembelajaran yang lebih baik.
3. Metode mengajar akan lebih bervariasi, tidak semata-mata komunikasi verbal melalui penuturan kata-kata oleh guru, sehingga siswa tidak bosan dan guru tidak kehabisan tenaga, apalagi guru mengajar untuk setiap jam pelajaran.
4. Siswa lebih banyak melakukan kegiatan belajar, sebab tidak hanya mendengarkan uraian guru, tetapi juga aktivitas lain seperti mengamati, melakukan, mendemonstrasikan, dan lain-lain.

2.1.3. Klasifikasi dan Karakteristik Media Pembelajaran

Dalam pengertian teknologi pendidikan, media atau bahan sebagai sumber

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

sendiri. Dari sini usaha-usaha penataan timbul, yaitu pengelompokan atau klasifikasi menurut kesamaan ciri atau karakteristiknya.

Menurut Arief S. Sadiman (2008:27) bahwa media pembelajaran dapat dikelompokkan menjadi tiga bagian, yaitu media visual, audio, dan audiovisual. Berikut ini secara singkat diuraikan dari masing-masing jenis dan karakteristik media pembelajaran :

a. Media Visual

Media visual adalah media yang menyampaikan pesan melalui penglihatan pemirsa atau media yang hanya dapat dilihat. Jenis media visual ini nampaknya yang paling sering digunakan oleh guru TK untuk membantu menyampaikan isi dari tema pembelajaran yang sedang dipelajari. Media visual terdiri atas media yang dapat diproyeksikan dan media yang tidak dapat diproyeksikan.

Media visual yang diproyeksikan pada dasarnya merupakan media yang menggunakan alat proyeksi yang disebut proyektor, gunanya untuk menayangkan gambar atau tulisan yang akan nampak pada layar (*screen*). Media proyeksi ini bisa berbentuk media proyeksi diam, misalnya gambar diam (*still picture*) dan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

1. Gambar Diam atau Gambar Mati

Gambar diam atau gambar mati adalah gambar-gambar yang disajikan secara fotografik atau seperti fotografik, misalnya gambar tentang manusia, binatang, tempat, atau objek lainnya yang ada kaitannya dengan bahan/isi tema yang diajarkan. Gambar diam ini ada yang sifatnya tunggal ada juga yang berseri, yaitu berupa sekumpulan gambar diam yang saling berhubungan satu dengan lainnya.

Keuntungan yang bisa diperoleh dari media gambar diam ini, diantaranya adalah:

- a. Media ini dapat menerjemahkan ide/gagasan yang sifatnya abstrak menjadi lebih konkret.
- b. Banyak tersedia dalam buku-buku, majalah, surat kabar, kalender, dan sebagainya.
- c. Mudah menggunakannya dan tidak memerlukan peralatan lain.
- d. Tidak mahal, bahkan mungkin tanpa mengeluarkan biaya untuk pengadaannya.
- e. Dapat digunakan pada setiap tahap pembelajaran dan semua tema.

Ada beberapa kelemahan dari media ini, yaitu terkadang ukuran gambar

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Unsur-unsur yang terdapat dalam media grafis ini adalah gambar dan tulisan. Media ini dapat digunakan untuk mengungkapkan fakta atau gagasan melalui penggunaan kata-kata, angka serta bentuk simbol (lambang). Bila akan menggunakan media grafis ini harus memahami dan mengerti arti simbol-simbolnya sehingga media ini akan lebih efektif untuk menyajikan isi tema kepada anak. Karakteristik media ini, sederhana, dapat menarik perhatian, murah, dan mudah disimpan dan dibawa. Jenis-jenis media grafis ini diantaranya adalah grafik, bagan, diagram, poster, kartun, dan komik. Contoh media grafis di TK adalah gambar anak membuang sampah dengan tulisan “Buanglah sampah pada tempatnya” dan gambar rambu-rambu lalu lintas dengan tulisannya.

3. Media Model

Media model adalah media tiga dimensi yang sering digunakan dalam pembelajaran di TK, media ini merupakan tiruan dari beberapa objek nyata, seperti objek yang terlalu besar, objek yang terlalu jauh, objek yang terlalu kecil, objek yang terlalu mahal, objek yang jarang ditemukan, atau objek yang terlalu rumit untuk dibawa ke dalam kelas dan sulit dinilai dari wujud aslinya. Jenis-jenis

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

4. Media Realita

Media realita merupakan alat bantu visual dalam pembelajaran yang berfungsi memberikan pengalaman langsung (*direct experience*) kepada anak. Realita ini merupakan benda, yang sesungguhnya contoh penggunaan media realita di TK seperti mata uang, tumbuhan, binatang, yang tidak berbahaya dan sebagainya.

b. Media Audio

Media audio adalah media yang mengandung pesan dalam bentuk auditif (hanya dapat didengar) yang dapat merangsang pikiran, perasaan, perhatian, dan kemauan anak untuk mempelajari isi tema. Contoh media audio, adalah program kaset suara dan program radio. Penggunaan media audio dalam kegiatan pembelajaran di TK pada umumnya untuk melatih keterampilan yang berhubungan dengan aspek-aspek keterampilan mendengarkan. Dari sifatnya yang auditif, media ini mengandung kelemahan yang harus diatasi dengan cara memanfaatkan media lainnya. Contoh media audio di TK adalah *tape recorder* dan radio

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

- b. Karena sifatnya yang auditif jika ingin hasil belajar yang dicapai anak lebih optimal, diperlukan juga pengalaman-pengalaman secara visual. Kontrol belajar bisa dilakukan melalui penguasaan perbendaharaan kata-kata, bahasa, dan susunan kalimat.

c. Media Audiovisual

Sesuai dengan namanya, media ini merupakan kombinasi dari media audio dan media visual atau biasa disebut media pandang-dengar. Dengan menggunakan media audiovisual ini maka penyajian isi tema kepada anak akan semakin lengkap dan optimal. Selain itu media ini dalam batas-batas tertentu dapat menggantikan peran dan tugas guru. Dalam hal ini guru tidak selalu berperan sebagai penyampai materi karena penyajian materi bisa diganti oleh media. Peran guru bisa beralih menjadi fasilitator belajar, yaitu memberikan kemudahan bagi anak untuk belajar. Contoh dari media audiovisual ini diantaranya program televisi/video pendidikan /instruksional, program slide suara, dan sebagainya.

Maksud dari media pembelajaran sederhana adalah jenis media yang memiliki ciri-ciri mudah dibuat bahan-bahannya mudah diperoleh mudah

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

2.1.4. Kriteria Pemilihan Media

Perlu diingat bahwa memilih media yang tepat untuk pembelajaran yang akan dilakukan pada dasarnya merupakan proses pengambilan keputusan dari berbagai alternatif (pilihan) yang ada. Guru bisa menentukan media yang akan digunakan apabila terdapat berbagai media yang dapat diperbandingkan, sedangkan apabila hanya tersedia satu jenis media pembelajaran atau jumlahnya sangat terbatas maka tidak bisa memilih, atau dengan kata lain hanya dapat menggunakan media apa adanya.

Menurut Arief S. Sadiman (2008:85) dalam merencanakan dan memilih media pembelajaran harus disesuaikan dengan:

1. Perencanaan pembelajaran di TK, yaitu satuan kegiatan mingguan (SKM) atau satuan kegiatan harian (SKH).
2. Sasaran belajar, yaitu anak yang akan mempelajari tema melalui media pembelajaran tersebut.
3. Tingkat keterbacaan media, maksudnya apakah media tersebut sudah memenuhi syarat-syarat teknis seperti kejelasan gambar dan hurufnya

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

agak sulit dihindari. Untuk menghindarinya sebaiknya guru selalu meminta pandangan, pendapat, saran, atau koreksi dari teman sejawat (guru lain) atau dari anak.

Dalam memilih dan menggunakan media pendidikan harus sesuai dengan kriteria-kriteria sebagai berikut :

1. Tujuan mengajar
2. Bahan pelajaran
3. Metode mengajar
4. Adanya alat yang tersedia
5. Jalan pelajarannya
6. Penilaian hasil belajr
7. Pribadi guru
8. Minat dan kemampuan siswa
9. Situasi pelajaran yang sedang berlangsung

Menurut Nana Sudjana (2010:4), dalam memilih media untuk kepentingan

pengajaran sebaiknya memperhatikan kriteria-kriteria sebagai berikut :

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4. Keterampilan guru dalam menggunakannya, apapun jenis media yang diperlukan syarat utama adalah guru dapat menggunakannya dalam proses pengajaran.
5. Tersedia waktu untuk menggunakannya, sehingga media tersebut dapat bermanfaat bagi siswa selama pengajaran berlangsung.
6. Sesuai dengan taraf berfikir siswa, dalam memilih media pendidikan harus sesuai dengan taraf berfikir siswa sehingga makna yang terkandung didalamnya dapat dipahami oleh para siswa.

Dengan kriteria pemilihan media tersebut, guru dapat lebih mudah menggunakan media mana yang dianggap tepat untuk membantu mempermudah tugas-tugasnya sebagai pengajar. Kehadiran media dalam kegiatan pembelajaran jangan dipaksakan sehingga mempersulit tugas guru, tetapi harus sebaliknya yakni mempermudah guru dalam menjelaskan bahan pengajaran.

2.2. Pengertian Sains

Sains atau Ilmu Pengetahuan Alam adalah ilmu yang seeksplor kebendaan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

tubuh pengetahuan yang terorganisir dengan baik mengenai dunia fisik alami. Sebagai proses, sains yang mencakup menelusuri, mengamati, dan melakukan percobaan. Selanjutnya Carin dan Sund dalam Yulianti mendefinisikan sains sebagai pengetahuan yang sistematis atau tersusun secara teratur, berlaku umum, dan berupa kumpulan data hasil observasi dan eksperimen. Aktivitas dalam sains selalu berhubungan dengan percobaan-percobaan yang membutuhkan keterampilan dan kerajinan. Secara sederhana, sains dapat juga didefinisikan sebagai apa yang dilakukan oleh para ahli sains. Dengan demikian, sains bukan hanya kumpulan pengetahuan tentang benda atau makhluk hidup, tetapi menyangkut cara kerja, cara berpikir, dan cara memecahkan masalah. Ilmuwan sains selalu tertarik dan memperhatikan peristiwa alam, selalu ingin mengetahui apa, bagaimana, dan mengapa tentang suatu gejala alam dan hubungan kausalnya.

Dalam sains, terdapat tiga unsur utama, yaitu sikap manusia, proses atau metodologi, dan hasil yang satu sama lain tidak dapat dipisahkan. Sikap manusia yang selalu ingin tahu tentang benda-benda, makhluk hidup, dan hubungan sebab-akibatnya akan menimbulkan permasalahan-permasalahan yang selalu ingin

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Reject All

pada anak usia dini harus dilakukan dalam situasi yang menyenangkan sehingga anak tidak merasa bosan dalam mengikuti pelajaran. Selain menyenangkan, metode, materi dan media yang digunakan harus menarik perhatian serta mudah diikuti sehingga anak akan termotivasi untuk belajar.

Melalui kegiatan bermain anak diajak untuk bereksplorasi, menemukan dan memanfaatkan objek-objek yang dekat dengannya, sehingga pembelajaran menjadi lebih bermakna. Bermain bagi anak juga merupakan suatu proses kreatif untuk bereksplorasi, mempelajari keterampilan yang baru dan bermain dapat menggunakan simbol untuk menggambarkan dunianya. Pembelajaran harus dirancang sedemikian sehingga melalui bermain anak-anak menemukan konsep dengan suasana yang menyenangkan dan tidak terasa anak telah belajar sesuatu dalam suasana bermain yang menyenangkan.

3. Selektif, Kreatif, dan Inovatif

Materi sains yang disajikan dipilih sedemikian rupa sehingga dapat disajikan melalui bermain. Proses pembelajaran yang dilakukan melalui kegiatan-

1 1 1 1 1 1 1 1 1 1

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

tahap perkembangan anak. Dalam pelaksanaan proses belajar mengajar sains di TK, guru harus memahami dan menguasai metode pembelajaran sains yang digunakan. Dengan menguasai metode pembelajaran sains, diharapkan tujuan pendidikan di TK yaitu untuk mengembangkan kemampuan fisik, kognitif, bahasa, sosial-emosi, konsep diri, disiplin, kemandirian, seni, moral dan nilai-nilai agama dapat tercapai secara terpadu optimal.

Menurut Suyanto (2005:158) dalam Dwi Yulianti pengenalan sains untuk siswa Taman Kanak-kanak dan Raudlatul Athfal, dilakukan untuk mengembangkan kemampuan sebagai berikut :

- a. Eksplorasi dan investigasi, yaitu kegiatan untuk mengamati dan menyelidiki objek dan fenomena alam.
- b. Mengembangkan keterampilan proses sains dasar, seperti melakukan pengamatan, mengukur, mengkomunikasikan hasil pengamatan, dan sebagainya.
- c. Mengembangkan rasa ingin tahu, rasa senang, dan mau melakukan kegiatan

• • • • •

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

indah. Namun, hanya dapat dinikmati keindahannya dalam waktu yang tidak lama karena gelembung sabun ini ringan dan sangat rapuh. Ketika meniup gelembung sabun, angin dengan kecepatan rendah pun akan menerbangkan gelembung sabun tersebut. Jika meniup gelembung ke udara di dalam ruangan, maka akan segera jatuh dan hilang bahkan sebelum sampai ke lantai. Karena gelembung sabun sangat ringan, maka akan dapat melayang di udara yang hanya sedikit lebih padat daripada udara yang mengisi mereka. (http://dimas-ardian.blogspot.com/2009/08/bermain-gelembung-sabun_31.html)

Menurut Guerrier seorang guru kelompok bermain bahwa media *Bubble* atau gelembung adalah salah satu kegiatan pembelajaran sains sederhana dari permainan gelembung sabun yang memungkinkan anak untuk melihat hasil percobaan secara langsung. Anak dapat melihat dan mempraktekkan kegiatan secara langsung seperti (meniup menggunakan sedotan) dapat menimbulkan reaksi pada lukisannya (terciptanya gelembung). Pada saat anak meniup air sabun, mereka dapat membuat bentuk gelembung dengan cara menekan kertas sehingga

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

yang diperoleh anak dari dapat menambah kemampuan bereksplorasi yang penting untuk perkembangan kognitif anak.

Merangsang kreativitas dan perkembangan kognitif anak dengan media *Bubble* menjadikan anak tumbuh dan berkembang dengan baik serta dapat memperluas wawasan anak tentang sains sederhana pada saat tahap perkembangan kemampuan menganalisa, berkomunikasi dan memecahkan masalah.

Selain manfaat di atas, anak dapat mengembangkan kemampuan motorik halusnya ketika melakukan kegiatan *Bubble* atau gelembung dengan cara mengontrol tangan, mulut, dan tenggorokan. Meniup dengan sedotan untuk mengontrol pernapasan, memegang sedotan melatih kemampuan mencengkeram yang pada dasarnya cukup sulit dilakukan untuk tangan kecil anak.

Dalam permainan *Bubble*, di dalamnya terdapat unsur kegiatan pencampuran warna dasar/primer sehingga dapat menghasilkan warna baru, pengukuran (menakar) deterjen, pengenalan karakteristik zat (cair, padat, dan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

2.4.2 Cara Pembuatan Media *Bubble*

Sabun dan deterjen adalah bagian integral dari produk rumah tangga.

Sementara itu, anak-anak suka mandi busa, mereka pasti akan menyukai ide membuat gelembung sabun di rumah, tanpa membeli sesuatu dari luar. Cara membuat gelembung dengan sabun cuci piring atau sampo, hal yang menarik untuk belajar. Langkah-langkah untuk membuat bubble atau gelembung adalah sebagai berikut :

1. Air 1 ember, dibagi menjadi 3 dalam wadah yang lumayan besar.
2. Deterjen merk Rinso, sabun colek Krim Ekonomi, sampo, sabun batang, sabun pencuci tangan/handsoap dan sunlight.
3. Pewarna makan atau cat berbahan dasar air yang tidak beracun 3 warna (merah, biru dan kuning).
4. Gelas aqua
5. Sedotan
6. Kertas HVS

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

2. Kemudian memasukkan 3 botol pewarna makanan ke dalam wadah yang telah berisi air putih dengan masing-masing warna merah, kuning dan biru.
3. Mengaduk air yang sudah dicampur pewarna dengan pengaduk kayu.
4. Setelah itu masing-masing anak mengambil gelas aqua dan menakar air yang sudah diberi pewarna dengan takaran $\frac{1}{4}$ gelas warna merah, biru atau kuning sesuai petunjuk guru.
5. Kemudian anak mengambil warna lain, misal merah+kuning supaya menjadi warna orange, biru+kuning supaya menjadi warna hijau dan warna merah biru supaya menjadi warna ungu dengan takaran yang sama yaitu $\frac{1}{4}$ gelas aqua.
6. Setelah campuran warna dasar dibuat, anak memilih salah satu (sabun colek krim ekonomi/sabun cair/sabun batang/handsoap/sampo/deterjen rinso) masing-masing percobaan dengan sendok teh/sendok kecil dengan 3 takaran, kemudian diaduk dengan kayu pengaduk.
7. Setelah diaduk larutan deterjen tersebut ditiup menggunakan sedotan sampai berbusa dan busa tersebut meluap sampai keluar dari gelas.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

11. Setelah gambar gelembung mengering, dorong anak untuk mendiktekan beberapa kalimat mengenai gelembung dan membentuk gambar dari lukisan gelembungnya tersebut.

12. Meminta anak untuk membuang sedotan setelah mereka melukis gelembung.

(<http://www.colorsforearth.com/PDF-Files/Classroom/BubblePainting.pdf>.)

2.5. Hakikat Anak Usia Dini

Anak usia dini adalah anak yang baru dilahirkan sampai usia 6 tahun. Usia ini merupakan usia yang sangat menentukan dalam pembentukan karakter dan kepribadian anak. Menurut Yuliani Nurani (2009:54) bahwa anak usia dini adalah anak berada pada rentang usia 0-8 tahun, dimana pada masa ini anak sedang mengalami pertumbuhan dan perkembangan yang sangat pesat. Hampir 80% kecerdasan anak mulai terbentuk, tahap awal pertumbuhan dan perkembangan anak dimulai pada masa prenatal. Selanjutnya Montessori dalam Hainstock (1999 :10-11) yang dikutip Yuliani bahwa masa usia dini disebutkan sebagai “masa peka”, yang merupakan masa munculnya berbagai potensi tersembunyi (*hidden*

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Tidak ada satu anak pun di dunia ini yang mempunyai jasad dan fikiran serta persaan yang sama, sekalipun keduanya adalah kembar siam.

Setiap anak akan menunjukkan pola pandangan, sikap serta perilaku yang berbeda antara satu dengan yang lainnya. Pandangan, sikap dan perilaku anak akan dipengaruhi oleh keadaan komponen hidup yang dimilikinya. Berdasarkan kondisi ini, guru akan menjumpai berbagai ragam keunikan anak yang sangat indah dalam proses belajar mengajar.

Ada anak yang mempunyai sifat pendiam, ada yang agresif dan tidak mau diam, ada anak yang pemalu, pemberani, pemaarah, kemampuan berbahasanya baik tetapi keterampilan motorik halusnya kurang baik, ada anak yang jasmaninya sangat baik tetapi daya pikirnya kurang baik, dan banyak lagi yang tidak dapat dihitng satu persatu. Ragam keunikan tersebut harus mampu diantisipasi dan dihadapi guru pada waktu sebelum, ketika dan setelah melaksanakan pembelajaran.

2. Anak berkembang secara bertahap

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dan melaksanakan perintah serta tugas yang diberikan guru. Ada juga anak yang lambat memahami isi tugas, bahkan perlu memperoleh penjelasan yang lebih rinci mengenai tugas yang akan dikerjakannya.

3. Anak adalah pelajar yang aktif

Anak bukanlah individu tanpa isi apa-apa (seperti botol kosong). Ia dilahirkan dengan membawa sejumlah potensi (kemampuan dasar untuk berkembang) yang harus dikembangkan lebih lanjut. Sebagai contoh anak usia TK akan muncul suatu potensi (daya) untuk bereksplorasi terhadap lingkungan sekitar. Potensi bereksplorasi akan terlihat antara lain pada seringnya anak mengajukan pertanyaan secara spontan, tertarik pada sesuatu yang baru dilihat serta senang membongkar dan berusaha memasang kembali sesuatu.

4. Anak merupakan suatu sistem energi

Setiap anak dapat dipandang sebagai suatu sistem energi. Bagian-bagian (komponen) dalam sistem energinya diorganisasikan dalam struktur tubuh dan mental serta dikoordinasikan dalam berbagai fungsi. Sebagai suatu

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

2.5.1. Karakteristik Anak Usia Dini

Anak usia dini adalah anak yang berusia dari 0-8 tahun, mempunyai karakteristik sebagai berikut :

a. Memiliki rasa ingin tahu yang besar.

Anak usia dini sangat ingin tahu tentang dunia sekitarnya. Pada masa bayi rasa ingin tahu ini ditunjukkan dengan meraih benda yang ada dalam jangkauannya, kemudian memasukkannya ke mulutnya. Pada usia 3-4 tahun anak sering membongkar pasang segala sesuatu untuk memenuhi rasa ingin tahunya. Anak juga mulai gemar bertanya meski dalam bahasa yang masih sangat sederhana.

b. Merupakan pribadi yang unik

Meskipun banyak kesamaan dalam pola umum perkembangan anak usia dini, setiap anak memiliki kekhasan tersendiri dalam hal bakat, minat, gaya belajar, dan sebagainya. Keunikan ini berasal dari faktor genetik dan lingkungan. Untuk itu pendidik perlu menerapkan pendekatan individual

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

menciptakan adanya teman imajiner. Teman imajiner itu bisa berupa orang, benda, ataupun hewan.

d. Masa potensial untuk belajar

Masa itu sering juga disebut sebagai “*golden age*” atau usia emas.

Karena pada rentang usia itu anak mengalami pertumbuhan dan perkembangan yang sangat pesat dalam berbagai aspek. Pendidik perlu memberikan berbagai stimulasi yang tepat agar masa peka ini tidak terlewatkan begitu saja. Tetapi mengisinya dengan hal-hal yang dapat mengoptimalkan tumbuh kembang anak.

e. Menunjukkan sikap egosentris

Pada usia ini anak memandang segala sesuatu dari sudut pandangnya sendiri. Anak cenderung mengabaikan sudut pandang orang lain. Hal itu terlihat dari perilaku anak yang masih suka berebut mainan, menangis, atau merengek sampai keinginannya terpenuhi.

f. Memiliki rentang daya konsentrasi yang pendek

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dirinya. Ia mulai belajar bagaimana caranya agar ia bisa diterima lingkungan sekitarnya. Dalam hal ini anak mulai belajar untuk berperilaku sesuai tuntutan dari lingkungan sosialnya karena ia mulai merasa membutuhkan orang lain dalam kehidupannya.

Selain karakteristik yang unik tersebut perlu ada perhatian pada titik kritis perkembangan yang perlu diperhatikan pada anak usia dini. Titik kritis itu meliputi :

- a. Membutuhkan rasa aman, istirahat dan makanan yang bergizi.
- b. Menirukan sesuatu hal yang dilihat dan didengarnya.
- c. Membutuhkan latihan dan rutinitas.
- d. Selalu banyak bertanya dan menginginkan jawaban.
- e. Cara berpikir anak berbeda dengan orang dewasa.
- f. Membutuhkan pengalaman langsung.
- g. Trial and error menjadi hal pokok dalam belajar.
- h. Bermain merupakan dunia anak-anak.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

terlalu mementingkan untuk bisa beraktivitas sendiri. Biasanya mereka sudah berhasil menguasai berbagai ketrampilan baru dengan baik, seperti merangkak maju dan mundur, dan melompat dengan satu kaki. mereka masih menikmati belajar hal dengan melakukannya sendiri. Kebanyakan mereka mampu memakai dan melepas baju sendiri, mengancingkan dan melepaskan kancing baju, kecuali memakai sepatu. Bisa melakukan kegiatan harian dengan cepat mereka bersedia mengambil resiko untuk mencapai tujuannya.

a. Karakteristik Sosial

Peningkatan dalam permainan kelompok terjadi pada usia ini, meskipun jumlah anak dalam kelompok permainan masih kecil, mereka mampu berkomunikasi lebih baik dengan anak lain, menambahkan angka angka baru dengan lebih mudah dan senang. Pada usia ini anak lebih menikmati permainan situasi “kehidupan nyata”. Anak bermain bersama dengan saling memberi dan menerima arahan. Anak mulai mampu berbagi dan bergiliran dengan inisiatif mereka sendiri. Anak menjadi sosialis.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

c. Kemampuan Kognitif

Bahasanya telah berkembang, anak mampu menangani secara lebih efektif dengan ide idenya melalui bahasa dan mulai mampu mendeskripsikan konsep-konsep yang lebih abstrak. mereka menikmati kemampuannya menggunakan kata kata dan belajar mengenai makna dan pengaruh dari kata kata tersebut. Anak dalam usia ini mulai bertanya tentang banyak hal. Kata-kata ‘mengapa’ atau ‘bagaimana’ menjadi sangat penting bagi mereka. Skema obyek dan pemikiran menjadi semakin besar dan semakin banyak, ketika mereka mendapatkan pengalaman-pengalaman baru dan mengembangkan pemikirannya. Contoh, konsep mereka mengenai waktu menjadi semakin luas. Mereka bisa memahami hari, minggu, bahkan bulan. Hal-hal tersebut menjadi sesuatu yang berarti bagi mereka.

d. Catatan untuk Guru dan Orang Tua

Anak usia 4 -5 tahun dapat di gambarkan sebagai “mobil sport” di bandingkan saat mereka berumur 3 tahun (lebih cepat, tangkas, halus, pamer, dan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

- b. Anak mampu mendeskripsikan konsep-konsep yang bersifat abstrak.
- c. Anak selalu banyak bertanya dalam segala hal.
- d. Anak mulai menunjukkan hubungan dan kemampuan bekerja sama yang lebih erat dengan temannya
- e. Anak memilih teman berdasarkan kesamaan aktivitas dan kesenangannya. anak mampu memahami pembicaraan orang lain.

2.5.3. Perkembangan Kognitif Anak Usia Dini

2.5.3.1. Pengertian Kognitif

Manusia adalah makhluk Tuhan yang telah diciptakan secara sempurna dan istimewa, yang telah dikaruniai akal dan pikiran. Melalui akal dan pikiranlah manusia dapat hidup dan bersosialisasi dengan sesama serta makhluk lainnya. Kemampuan kognitif ini berisikan akal dan pikiran manusia yang harus dikembangkan bersamaan dengan kemampuan lainnya (bahasa, sosial-emosional, moral dan agama).

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

kecerdasan majemuk dikembangkan berdasarkan pada pandangan bahwa pada teori kecerdasan yang telah dikembangkan sebelumnya hanya melihat kecerdasan manusia dari sisi linguistik dan logika matematika, sedangkan sisi kecerdasan manusia yang lain tidak dilihat.

Gardner memandang kecerdasan manusia berdasarkan berbagai peranan yang terdiri dari kemampuan untuk menyelesaikan masalah, atau menciptakan produk yang berharga dalam satu atau beberapa lingkungan budaya masyarakat. Sudut pandang baru tentang kecerdasan ini diyakini lebih manusiawi dan lebih dapat dipercaya dibandingkan dengan teori kecerdasan sebelumnya.

Berdasarkan riset yang dilakukan oleh Gardner dan timnya, maka Gardner mendapatkan 7 kecerdasan. Pada individu normal suatu kecerdasan ini tidak berdiri sendiri, tetapi selalu berfungsi bersama-sama dengan kecerdasan yang lain. Namun, biasanya pada seseorang akan memiliki beberapa kecerdasan yang terlihat menonjol. (<http://id.shvoong.com/social-sciences/psychology/1958683-multiple-intelligences-kecerdasan-majemuk-teori/#ixzz2L9ANmYPU>).

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

kognitif anak didominasi oleh perspektif biologi-maturasi, yang memberikan pengaruh “alam” (*nature*) pada perkembangan, dan perspektif lingkungan belajar, yang memberikan bobot hampir sepenuhnya pada pengaruh “pengasuhan” (*nurture*).

Sebaliknya, Piaget dalam Catron dan Allen yang dikutip oleh Yuliani (2009 :58) berfokus pada interaksi antara kemampuan naturasi alami anak dan interaksinya dengan lingkungan. Piaget memandang anak sebagai partisipan aktif di dalam proses perkembangan biologis atau rangsang-rangsang eksternal. Piaget memandang anak mencari jawaban dengan melakukan eksperimen terhadap dunia untuk mengetahui apa yang terjadi.

2.5.3.2.2. Tahap-Tahap Perkembangan Kognitif Menurut Piaget

Perkembangan kognitif berpusat pada perkembangan cara penerimaan dan mental anak. Menurut Piaget (1999 : 10) anak-anak mencoba berusaha memahami hal-hal baru untuk mengembangkan pola pikir anak dan jika pemahaman anak

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Selanjutnya menurut Soemiarti (2003:28), Piaget membagi perkembangan kognitif ke dalam empat tahap, yaitu tahap sensorimotor, tahap praoperasional, tahap operasional konkrit, dan tahap operasional formal.

1. Tahap Sensorimotor (usia 0-2 tahun)

Pada masa dua tahun kehidupannya anak berinteraksi dengan dunia di sekitarnya terutama melalui aktivitas sensori (melihat, meraba, merasa, mencium dan mendengar) dan persepsinya terhadap gerak fisik dan aktivitas yang berkaitan dengan sensori tersebut.

Selama dalam tahap ini, pengetahuan bayi tentang dunia adalah terbatas pada persepsi yang diperoleh dari pengindraannya dan kegiatan motoriknya. Perilaku yang dimiliki masih terbatas pada respon motorik sederhana yang disebabkan oleh rangsangan penginderaan. Anak menggunakan keterampilan dan kemampuannya yang dibawa sejak lahir seperti melihat, menggenggam, dan mendengar untuk mempelajari lingkungannya.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

anak tidak berpikir secara operasional yaitu suatu proses berpikir yang dilakukan dengan jalan menginternalisasi suatu aktivitas yang memungkinkan anak mengaitkannya dengan kegiatan yang telah dilakukan sebelumnya.

Tahap ini merupakan masa permulaan bagi anak untuk membangun kemampuan dalam menyusun pikirannya. Oleh sebab itu cara berpikir anak pada tahap ini belum stabil dan tidak terorganisasi dengan baik. Tahap praoperasional dapat dibagi ke dalam tiga sub tahap fungsi simbolik, sub tahap berpikir secara egosentris dan intuitif.

Sub tahap fungsi simbolik terjadi pada usia 2-4 tahun. Pada masa ini anak telah memiliki kemampuan untuk menggambarkan suatu objek yang secara fisik tidak hadir. Kemampuan ini membuat anak dapat menggunakan balok-balok kecil untuk membangun rumah, menyusun puzzle dan kegiatan lainnya. Pada masa ini anak sudah dapat menggambar manusia secara sederhana. Sub tahap ini juga dikenal dengan sub tahap berpikir egosentris. Berpikir secara egosentris ditandai oleh ketidakmampuan anak

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

belum memiliki kemampuan untuk berpikir secara kritis tentang apa yang ada dibalik suatu kejadian.

3. Tahap Operasional Kongkrit (7-12 tahun)

Pada tahap operasional kongkrit kemampuan anak untuk berpikir secara logis sudah berkembang, dengan syarat objek yang menjadi sumber berpikir logis tersebut hadir secara kongkrit. Kemampuan berpikir logis ini terwujud dalam kemampuan mengklasifikasikan objek sesuai dengan klasifikasinya, mengurutkan benda sesuai dengan tata urutnya, kemampuan untuk memahami cara pandang orang lain, dan kemampuan berpikir secara deduktif.

4. Tahap Operasional Formal (12 tahun sampai usia dewasa)

Tahap operasional formal ditandai oleh perpindahan dari cara berpikir kongkrit ke cara berpikir abstrak. Kemampuan berpikir abstrak dapat dilihat dari kemampuan mengemukakan ide-ide, memprediksi kejadian yang akan terjadi, dan melakukan proses berpikir ilmiah, yaitu mengemukakan hipotesis

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

obyek yang mereka jumpai. Anak-anak tidak hanya sekedar bereksperimen namun mereka juga mengumpulkan hal-hal yang telah mereka pelajari kemudian terisolasi. Piaget mengemukakan bahwa anak-anak mengontruksi keyakinan-keyakinan dan pemahaman-pemahaman mereka berdasarkan pengalaman (konstruktivisme).

Menurut teori Piaget dalam Ahmad Rifa'i (2009:29), bahwa pada fase-fase perkembangan kognitif dapat diketahui bahwa perkembangan kognitif anak usia dini berada pada fase/tahap praoperasional yang mencakup tiga aspek, yaitu :

1. Berpikir Simbolik

Aspek berpikir simbolik adalah kemampuan untuk berpikir tentang obyek dan peristiwa walaupun obyek dan peristiwa tersebut tidak hadir secara fisik (nyata) di hadapan anak. Contoh anak bermain drama dengan memanfaatkan balok kayu sebagai telepon.

2. Berpikir Egosentris

Aspek berpikir secara egosentris yaitu cara berpikir tentang benar atau

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dengan pasti alasan untuk melakukannya, anak membuat coretan-coretan di kertas tanpa mengetahui apa yang sedang ditulisnya.

2.5.3.4. Prinsip-Prinsip Perkembangan Kognitif

Dalam memahami dunia secara aktif, anak-anak menggunakan skema (kerangka kognitif atau kerangka referensi). Sebuah skema (sctrcmal adalah konsep atau kerangka yang eksis di dalam pikiran individu yang dipakai untuk mengorganisasikan dan menginterpretasikan informasi. Skema bisa merentang mulai dari skema sederhana (seperti skema sebuah mobil) sampai skema kompleks (seperti skema tentang apayang membentuk alam semesta). Anak usia enam tahun yang mengetahui bahwa lima mainan kecil dapat disimpan didalam kotak kecil berukuran sama berarti ia sudah memanfaatkan skema angka atau jumlah.

Menurut Piaget yang dikutip Achmad Rifa'i (2009:25) bahwa perkembangan kognitif anak pada hakikatnya merupakan hasil dari proses

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Dalam kehidupan seseorang, dia selalu mengalami sesuatu, dan informasi yang diperoleh melalui pengalaman itu kemudian digunakan untuk memodifikasi, menambahkan, atau mengubah skema yang telah dimiliki sebelumnya. Misalnya, anak memiliki skema mengenai jenis binatang, misalnya kambing. Apabila anak hanya memiliki pengalaman bahwa kambing itu kecil, maka dia akan menggeneralisasikan bahwa semua kambing adalah binatang kecil. Namun, seandainya anak itu menghadapi kambing yang besar, maka anak itu memasukkan informasi baru, memodifikasi skema yang telah dimiliki, yang pada akhirnya dia dapat mengatakan bahwa kambing itu ada yang besar dan ada pula yang kecil.

2. Asimilasi dan Akomodasi

Asimilasi berkaitan dengan penyerapan informasi baru ke dalam informasi yang telah ada di dalam skemata (struktur kognitif) anak. Proses ini bersifat subjektif, karena seseorang cenderung memodifikasi pengalaman atau informasi yang agak atau sesuai dengan keyakinan yang telah dimiliki

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

baru dapat dimakan. Pada tahap ini telah terjadi proses akomodasi karena pengetahuan anak tentang jeruk telah diperluas, yaitu jeruk kalau akan dimakan harus dikupas dulu.

Akomodasi merupakan proses mengubah skema yang telah dimiliki dengan informasi baru. Akomodasi itu melibatkan kegiatan perubahan skema, atau gagasan yang telah dimiliki karena adanya informasi atau pengalaman baru. Skema baru itu dikembangkan terus selama dalam proses akomodasi.

3. Ekuilibrium

Piaget percaya bahwa setiap anak mencoba memperoleh keseimbangan antara asimilasi dan akomodasi dengan cara menerapkan mekanisme ekuilibrium. Anak mengalami kemajuan karena adanya perkembangan kognitif, maka penting untuk mempertahankan keseimbangan antara menerapkan pengetahuan yang telah dimiliki sebelumnya (asimilasi) dan mengubah perilaku karena adanya pengetahuan baru (akomodasi).

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

tentang jeruk dengan cara-cara yang harus dilakukannya agar buah tersebut dapat dimakan.

2.5.3.5. Teori Kognitif Menurut Bruner

Dalam kehidupan, anak dihadapkan kepada persoalan yang menuntut adanya pemecahan. Menyelesaikan suatu persoalan merupakan langkah yang lebih kompleks pada diri anak. Sebelum anak mampu menyelesaikan persoalan, anak perlu memiliki kemampuan untuk mencari cara penyelesaiannya.

Faktor kognitif mempunyai peranan penting bagi keberhasilan anak dalam belajar karena sebagian besar aktivitas dalam belajar selalu berhubungan dengan masalah mengingat dan berfikir.

Menurut Achmad Rifa'i (2009:31) bahwa Jerome Bruner dalam menyusun teori perkembangan kognitif memperhitungkan enam hal sebagai berikut ini :

1. Perkembangan intelektual ditandai oleh meningkatnya variasi respon terhadap stimulus.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

6. Pertumbuhan kognitif ditandai oleh semakin meningkatnya kemampuan menyelesaikan berbagai alternatif secara simultan, melakukan berbagai kegiatan secara bersamaan, dan mengalokasikan perhatian secara runtut pada berbagai situasi tertentu.

Berbeda dengan Piaget, Bruner dalam memahami karakteristik perkembangan kognitif tidak didasarkan pada usia tertentu. Kemudian berdasarkan pengamatannya terhadap perilaku anak, Bruner memiliki keyakinan bahwa ada tiga tahap perkembangan kognitif, yaitu :

Tahap enaktif. Pada tahap ini anak memahami lingkungannya. Misalnya, tidak ada kata yang membantu orang dewasa ketika mengajar anak berlatih naik sepeda. Belajar naik sepeda berarti lebih mengutamakan kecakapan motorik. Pada tahap ini anak memahami objek sepeda berdasarkan pada apa yang dilakukannya, misalnya dengan memegang, memnggerakkan, memukul, menyentuh dan sebagainya.

Tahap ikonik. Pada tahap ini informasi dibawa anak melalui imageri. Anak

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

menyusun gagasannya secara padat, misalnya menggunakan gambar yang saling berhubungan ataupun menggunakan bentuk-bentuk rumus tertentu.

2.5.3.6. Teori Kognitif Menurut Vygotsky

Tahap perkembangan anak tidak bisa berpindah ke ketahap berikutnya bila tahap sebelumnya belum selesai dan setiap umur tidak bisa menjadi patokan utama seseorang berada pada tahap tertentu karena tergantung dari ciri perkembangan setiap individu yang bersangkutan. Bisa saja seorang anak akan mengalami tahap praoperasional lebih lama dari pada anak yang lainnya sehingga umur bukanlah patokan utama.

Menurut Achmad Rifa'i (2009:34) ada tiga konsep yang dikembangkan dalam teori Vygotsky :

1. Keahlian kognitif anak dapat dipahami apabila dianalisis dan diinterpretasikan secara developmental.
2. Kemampuan kognitif dimediasi dengan kata, bahasa, dan bentuk diskursus

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Secara spesifik Vygotsky mengemukakan beberapa kegunaan dari alat berpikir, diantaranya :

1. Membantu memecahkan masalah

Adanya alat berpikir inilah seseorang akan mampu mencari jalan keluar terhadap permasalahan yang dihadapinya. Kerangka berpikir yang terbentuk pada fungsi pikir manusia yang akan menentukan keputusan yang diambilnya dalam pemecahan masalah yang dihadapi.

2. Memudahkan dalam melakukan tindakan

Vygotsky berpendapat bahwa dengan alat berpikirnya setiap individu akan dapat memilih tindakan atau perbuatan yang efektif dan efisien mungkin dalam mencapai tujuan. Kepraktisan dalam bertindak yang sering kali ditunjukkan oleh seorang anak dalam melakukan suatu aktivitas merupakan cerminan dari keberfungsian alat berpikirnya.

3. Memperluas kemampuan

Berdasarkan keberfungsian dari alat berpikirlah setiap individu akan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

diperoleh anak saat berinteraksi dengan lingkungannya, maka semakin cepat berkembang fungsi pikir.

Vygotsky meningkatkan bahwa peningkatan fungsi-fungsi mental seseorang terutama berasal dari kehidupan sosial atau kelompoknya, dan bukan sekedar dari individu itu sendiri. Teori Vygotsky sebenarnya lebih tepat disebut sebagai pendekatan ko-konstruktivisme, yaitu suatu proses mengkonstruksi pengetahuan baru secara bersama-sama antara semua pihak yang terlibat di dalamnya. Konsep-konsep penting teori revolusi-sosiokultural adalah hukum genetik tentang perkembangan (*genetic law of development*), zona perkembangan proksimal (*zone of proximal development*), dan mediasi.

Vygotsky percaya bahwa proses kognitif tertinggi yang berkembang anak berada di sekolah adalah saat terjadi interaksi antara anak dan pendidik.

2.5.3.7. Kemampuan Kognitif Anak Usia 4-5 Tahun

Pengetahuan akan pertumbuhan dan perkembangan anak sangat penting

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

mengalami pertumbuhan fisik, perkembangan bahasa, emosional, dan kognitif. Hal ini semakin tampak di usia 4-5 tahun.

Perkembangan kemampuan kognitif anak usia 4-5 tahun yaitu :

1. Mengenal fungsi benda dengan benar
2. Mengelompokkan berdasarkan bentuk, warna, ukuran dan fungsi secara sederhana
3. Mencocokkan hingga 11 warna
4. Menunjuk hingga 6 warna yang disebutkan,
5. Menyebutkan 3 warna dasar,
6. Mengenal dan menyebutkan bentuk geometri (lingkaran, persegi, segitiga)
7. Menunjukkan bentuk geometri yang diminta,
8. Memahami konsep banyak-sedikit, besar-kecil, penuh-kosong, ringan-berat, panjang-pendek, gemuk-kurus,
9. Memahami konsep buka-tutup, depan-belakang, keluar-masuk, atas-bawah
10. Mengklasifikasikan sekitar empat macam benda

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

- a. Mengenal benda berdasarkan fungsi (pisau untuk memotong, pensil untuk menulis),
 - b. Menggunakan benda-benda sebagai permainan simbolik (kursi sebagai mobil),
 - c. Mengenal gejala sebab akibat yang terkait dengan dirinya,
 - d. Mengenal konsep sederhana dalam kehidupan sehari-hari (gerimis, hujan, gelap, terang, temaram, dsb),
 - e. Mengkreasikan sesuatu sesuai dengan idenya sendiri
2. Konsep Bentuk, Warna, Ukuran dan Pola
- a. Mengklasifikasikan benda berdasarkan bentuk atau warna atau ukuran,
 - b. Mengklasifikasikan benda ke dalam kelompok yang sama atau kelompok yang sejenis atau kelompok yang berpasangan dengan 2 variasi,
 - c. Mengenal pola AB-AB dan ABC-ABC,
 - d. Mengurutkan benda berdasarkan 5 variasi ukuran atau warna.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Teori hereditas atau nativisme pertama kali dipelopori oleh seorang ahli filsafat. Dia berpendapat bahwa manusia lahir sudah membawa potensi-potensi tertentu yang tidak dapat dipengaruhi lingkungan.

2.5.3.8.2. Faktor lingkungan

Jhon Loke berpendapat bahwa manusia dilahirkan sebenarnya suci atau tabularasa. Menurut pendapatnya, perkembangan manusia sangatlah ditentukan oleh lingkungannya. Berdasarkan pendapat Jhon Loke tersebut perkembangan taraf intelegensi sangatlah ditentukan oleh pengalaman dan pengetahuan yang diperolehnya dari lingkungan hidupnya. (http://id.wikipedia.org/wiki/Tabula_rasa)

2.5.3.8.3. Kematangan

Tiap organ (fisik maupun psikis) dapat dikatakan telah matang jika telah mencapai kesanggupan menjalankan fungsinya masing-masing. Kematangan berhubungan erat dengan usia kronologis (usia kalender).

2.5.3.8.4. Pembentukan

Pembentukan adalah segala keadaan di luar diri seseorang yang

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

kemampuan bawaan, sebagai potensi yang masih perlu dikembangkan dan dilatih agar dapat terwujud. Bakat seseorang akan mempengaruhi tingkat kecerdasannya.

Artinya seseorang yang memiliki bakat tertentu, maka akan semakin mudah dan cepat mempelajari hal tersebut.

2.5.3.8.6. Kebebasan

Kebebasan yaitu kebebasan manusia berpikir divergen (menyebar) yang berarti bahwa manusia itu dapat memilih metode-metode tertentu dalam memecahkan masalah-masalah juga bebas dalam memilih masalah sesuai dengan kebutuhannya.

2.6. Model Pembelajaran Area di TK

Model pembelajaran adalah suatu desain atau rancangan yang menggambarkan proses rincian dan penciptaan situasi lingkungan yang memungkinkan anak berinteraksi dalam pembelajaran, sehingga terjadi perubahan atau perkembangan pada diri anak. Adapun komponen model pembelajaran

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Model pembelajaran berdasarkan area pada dasarnya hampir sama dengan model pembelajaran berdasarkan sudut-sudut kegiatan. Model ini lebih memberi kesempatan kepada anak didik untuk memilih kegiatan sendiri sesuai dengan minatnya. Pembelajarannya dirancang untuk memenuhi kebutuhan-kebutuhan spesifik anak dan menghormati keberagaman budaya. Kecuali itu juga menekankan pada pengalaman belajar bagi setiap anak, pilihan-pilihan kegiatan dan pusat-pusat kegiatan serta peran serta keluarga dalam proses pembelajaran. (<http://paudanakceria.wordpress.com/2011/02/17/model-model-pembelajaran-di-taman-kanak-kanak.html>).

Menurut Yuliani (2009:140), pembelajaran yang berpusat pada anak memiliki karakteristik sebagai berikut : 1) kegiatan mengikuti minat dan keinginan anak, 2) anak mengemukakan pemikiran dan mengidentifikasi kegiatannya sendiri, 3) pembelajaran memandang kebutuhan anak sebagai kebutuhan individu yang unik dan bernilai, 4) pengalaman langsung berpusat pada anak.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Sepuluh area yang ada yaitu area seni, area balok, area permainan dramatik, area Ilmu Pengetahuan Alam/sains, area baca, area musik, area matematika/berhitung, area pasir dan area air, serta kegiatan di luar kelas, memberikan keleluasaan anak memilih kegiatan yang sesuai dengan bakat dan minat anak. Kerjasama antara guru dan anak harus selalu terjalin agar penggunaan sistem area dapat berjalan dengan lancar.

Pembelajaran di area sains/IPA bertujuan untuk menyeimbangkan rasa ingin tahu alami anak-anak untuk mencari informasi tentang apa yang ada di lingkungan sekitarnya, dengan melalui proses pengamatan, mengukur, membandingkan, memperkirakan dan menjelaskan. (<http://id.shvoong.com/social-sciences/education/07/03/2011/kegiatan-dalam-area-yang-dipilih.html>).

2.7. Kerangka Berfikir

Media pendidikan di lingkungan pendidikan anak usia dini harus dimanfaatkan oleh guru untuk meningkatkan kualitas hasil pembelajaran yang

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

BAB 3

METODOLOGI PENELITIAN

3.1 Pendekatan Penelitian

Pendekatan penelitian yang digunakan dalam penelitian ini adalah penelitian kuantitatif. Dilihat dari pendekatan analisisnya, penelitian dengan pendekatan kuantitatif menekankan analisisnya pada data-data yang diperoleh di lapangan yang diolah dengan metode kuantitatif. Setelah diperoleh hasilnya, kemudian dideskripsikan dengan menguraikan kesimpulan yang didasari oleh data yang diolah dengan metode deskriptif tersebut.

3.2 Desain Penelitian

Desain penelitian yang digunakan dalam penelitian ini adalah desain penelitian eksperimen semu (sebab dapat dimanipulasikan terhadap variabel terikat). Dengan desain penelitian menggunakan *Pre-experimental Design*. *Pre-experimental Design* digunakan karena pada kenyataannya sulit mendapatkan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

terdapat pretest, sebelum diberi perlakuan. Dengan demikian hasil perlakuan dapat diketahui lebih akurat, karena dapat membandingkan dengan keadaan sebelum diberi perlakuan..

3.3 Lokasi Penelitian

Lokasi untuk penelitian ini adalah TK Pertiwi 49 Semarang.

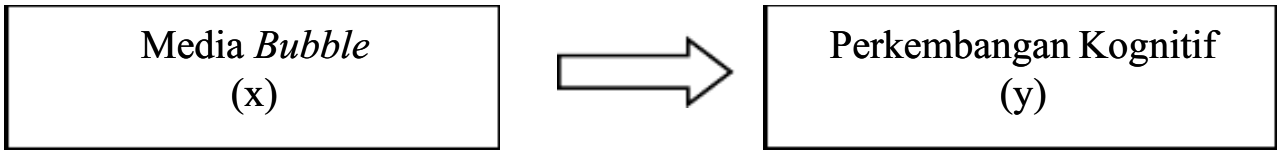
3.4 Variabel Penelitian

3.4.1 Identifikasi Variabel Penelitian

Variabel bebas dalam penelitian ini adalah media *bubble* dan variabel terikatnya adalah perkembangan kognitif anak.

3.4.2 Hubungan Antar Variabel Penelitian

Hubungan antar variabel dapat ditunjukkan dalam gambar sebagai berikut, dimana (x) adalah variable bebas dan (y) adalah variable tergantung.



Berdasarkan keterangan di atas. variabel-variabel itu adalah:

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

3.5 Populasi

3.5.1 Populasi Penelitian

Populasi dari penelitian ini adalah siswa TK A Pertiwi 49 Semarang tahun pelajaran 2012/2013 yang berjumlah 24 siswa.

3.6 Metode Pengumpulan Data

Metode pengumpulan data merupakan langkah yang paling utama dalam penelitian, karena tujuan utama dari penelitian adalah mendapatkan data (Sugiyono, 2009:308). Pada penelitian ini penulis menggunakan teknik observasi dan dokumentasi.

3.6.1 Observasi

Dalam penelitian ini peneliti menggunakan metode observasi Nonpartisipan, peneliti tidak terlibat dan hanya sebagai pengamat independen. (Sugiyono, 2009:145). Observasi digunakan untuk memperoleh data tentang suatu masalah, sehingga diperoleh suatu pemahaman atau pembuktian informasi/keterangan yang diperoleh sebelum dan sesudah dilakukan penelitian di

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

tersebut digunakan untuk mendapatkan data sekunder yaitu melihat dari raport, proses penilaian belajar siswa, laporan dan atau berbagai artikel dari , prasasti, notulen rapat, lengger, agenda, dan sebagainya.(Arikunto, 2010 :274)

Penelitian ini menggunakan metode ini untuk mendokumentasikan waktu penelitian dengan cara pengambilan gambar atau foto.

3.7 Metode Analisis Data

3.7.1 Teknik Analisis Deskriptif Presentatif

Metode ini digunakan untuk mengkaji deskripsi setiap variabel tersebut terdiri dari beberapa indikator hasil pengamatan yang tertuang dalam lembar observasi. Langkah-langkah yang ditempuh dalam penggunaan teknik analisis deskriptif adalah sebagai berikut :

1. Membuat Tabel Distribusi Peroleh Skor

Merencanakan skor dengan ketentuan skor yang telah ditetapkan. Untuk skor yang diberikan oleh responden memiliki iawahan maksimal 3 dan minimal 1

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Cara menentukan tingkat kriteria adalah sebagai berikut :

(1) Presentasi tertinggi diterapkan :

$$\frac{\text{skor maksimal}}{\text{skor mininal}} \times 100\%$$

(2) Skor terendah ditetapkan :

$$\frac{\text{skor minimal}}{\text{skor maksimal}} \times 100\%$$

(3) Rentang persentase ditetapkan = 100% -33% = 67%

(4) Kelas interval persentase ditetapkan = 67%:3 = 22%

(5) Membuat tabel interval kognitif anak usia 5-6 tahun

Tabel 3.1 Interval Skor

No	Interval presentasi	Kategori
1	77,01%-100%	Sangat Baik
2	55,01%-77,01%	Cukup Baik
3	33,01%-55,01%	Kurang Baik

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

BAB 4

HASIL PENELITIAN DAN PEMBAHASAN

4.1 HASIL PENELITIAN

4.1.1 Deskripsi Lokasi Penelitian

TK Pertiwi 49 Semarang berdiri sejak tanggal 12 Agustus 1996. TK Pertiwi 49 Semarang berada di bawah pengelolaan Yayasan Harapan Ibu, Dharma Wanita Pemerintah Kota Semarang, dan selama ini Ibu Pariyah, S.Pd. sebagai Kepala TK Pertiwi 49 Semarang hingga sekarang. TK Pertiwi 49 Semarang terletak di Jl. Raya Ngijo No. 2, Kecamatan Gunung Pati, Semarang. Adapun batas wilayah TK Pertiwi 49 Semarang adalah :

1. Batas sebelah utara : Kantor Kelurahan Ngijo
2. Batas sebelah barat : Jalan Raya Ngijo

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Kepala TK dan Guru Kelompok A, Reknaningsih, S.T. dan Sri Ismiyati, S.Pd.
sebagai Guru Kelompok B.

4.1.2 Cara Pembuatan *Bubble* sebagai Media Pembelajaran Sains Sederhana

Dalam pembuatan *bubble* ada berbagai macam cara, yaitu dengan bahan sabun, buah lerak, Rinso, sabun colek, sabun bayi, sampo dan sabun pencuci tangan. Dalam penelitian ini, peneliti mengeksperimenkan pembuatan bubble dengan berbagai bahan dasar sabun, yaitu sebagai berikut :

4.1.2.1 Pelaksanaan Hari Ke Satu

Pembukaan : ibu guru mengkondisikan anak-anak untuk mengikuti kegiatan upacara bendera. Setelah upacara selesai anak-anak dikondisikan ke dalam kelas untuk mulai pembelajaran. Anak-anak terlihat menyukai cara guru

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Alat dan bahan yang harus dipersiapkan untuk membuat *bubble* atau gelembung dengan bahan dasar deterjen Rinso adalah sebagai berikut :

1. Menyiapkan air ember ukuran 5 liter.
2. Baskom dengan diameter 25 cm 3 buah, yaitu baskom merah (A), baskom kuning (B) dan baskom biru (C).
3. Deterjen merk Rinso.
4. Pewarna makanan berbahan dasar air yang tidak beracun 3 warna (merah, biru dan kuning) dengan merk Rajawali.
5. Gelas aqua ukuran 200cc.
6. Sedotan.
7. Serbet.
8. Pengaduk dari kayu.
9. Sendok teh.

Sebelum kegiatan dimulai, ibu guru mengkondisikan anak terlebih dahulu.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

2. Kemudian memasukkan 3 botol pewarna makanan ke dalam baskom dengan warna yang berbeda-beda, baskom merah (A) untuk warna merah, baskom kuning (B) untuk warna kuning dan baskom biru (C) untuk warna biru.
3. Mengaduk air yang sudah dicampur pewarna dengan pengaduk kayu.
4. Setelah itu masing-masing anak mengambil gelas aqua dan menakar air yang sudah diberi pewarna dengan takaran $\frac{1}{4}$ gelas atau sekitar 25cc warna merah, biru atau kuning sesuai petunjuk guru.
5. Setelah anak memasukkan air berwarna ke dalam gelas kemudian anak menakar deterjen Rinso dengan sendok teh sebanyak 2 sendok teh dan mengaduknya dengan pengaduk kayu.
6. Setelah itu anak meniup air deterjen tersebut dengan sedotan sehingga terbentuk *bubble*/gelembung yang berwarna-warni.

Setelah semua kegiatan di Area Sains selesai anak-anak latihan Drum band. Waktu istirahat sekitar 30 menit digunakan anak-anak untuk bermain bebas dan berinteraksi dengan teman-temannya.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All



Gambar 4.1 Guru memberi penjelasan kepada anak tentang warna dasar (merah, kuning dan biru)



We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All



Gambar 4.3 Anak menakar deterjen Rinso



We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All



Gambar 4.4 Anak meniup air sabun sehingga tercipta gelembung

Kesimpulan penelitian hari pertama pada proses pembelajaran menggunakan media *Bubble* adalah anak dapat mengenal dan menyebutkan warna dasar seperti merah, kuning dan biru serta dapat menyebutkan minuman yang berwarna-warni seperti sirup.

4.1.2.2 Pelaksanaan Hari Kedua

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Kegiatan ini mencipta bentuk-bentuk geometri (lingkaran, persegi, segitiga, persegi panjang, dan kerucut) dari *bubble* yang tercipta dari hasil tiupan tersebut pada susunan batang lidi yang dibentuk menjadi bentuk segitiga, persegi dan persegi panjang.

Alat dan bahan yang harus dipersiapkan untuk membuat *bubble* atau gelembung dengan bahan dasar sabun colek Krim Ekonomi adalah sebagai berikut :

1. Menyiapkan air dalam ember ukuran 5 liter.
2. Baskom dengan diameter 25 cm 3 buah (baskom merah (A), baskom kuning (B) dan baskom biru (C).
3. Sabun colek Krim Ekonomi
4. Pewarna makanan berbahan dasar air yang tidak beracun 3 warna (merah, biru dan kuning) dengan merk Rajawali.
5. Gelas aqua ukuran 200cc.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Langkah-langkah pembuatan adalah :

1. Menyiapkan air putih dalam ember yang berukuran 5 liter dimasukkan ke dalam 3 buah baskom merah (A), baskom kuning (B) dan baskom biru (C) dengan diameter 25 cm sama banyak.
2. Kemudian memasukkan 3 botol pewarna makanan ke dalam baskom dengan warna yang berbeda-beda, baskom (A) warna merah, baskom (B) warna kuning dan baskom (C) warna biru.
3. Mengaduk air yang sudah dicampur pewarna dengan pengaduk kayu.
4. Setelah itu masing-masing anak mengambil gelas aqua dan menakar air yang sudah diberi pewarna dengan takaran $\frac{1}{4}$ gelas atau sekitar 25cc warna merah, biru atau kuning sesuai petunjuk guru.
5. Setelah anak memasukkan air berwarna ke dalam gelas kemudian anak memasukkan sabun colek Krim Ekonomi 3 colek ke dalam gelas aqua dan mengaduknya dengan pengaduk kayu hingga sabun coleknya larut.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Waktu istirahat digunakan anak-anak untuk bermain di luar kelas. Farin, Ilul, dan Rado tetap berada di dalam kelas membantu ibu guru membersihkan peralatan yang telah digunakan.

Kegiatan penutup dilaksanakan dengan memberikan evaluasi hasil pembelajaran anak-anak dan tanya jawab tentang kegiatan yang telah dilakukan. Ibu guru memmberi pertanyaan tentang bentuk-bentuk geometri yang dihasilkan dari permainan *bubble* dan anak-anak diminta menyebutkan makanan yang berbentuk geometri, misalnya roti tawar berbentuk persegi, donat berbentuk lingkaran, dan agar-agar yang berbentuk segitiga.

Kesimpulan penelitian hari kedua pada proses pembelajaran dengan media *bubble* adalah bahwa melalui permainan *bubble* anak dapat menyebutkan bentuk-bentuk geometri yang tercipta ketika *bubble*/gelembung ditaruh di tengah susunan lidi yang berbentuk segitiga, persegi dan persegi panjang.

4.1.2.3 Pelaksanaan Hari Ketiga

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All



Gambar 4.5 Anak lomba membawa piring di atas kepala

Kegiatan inti : sebelum kegiatan pembelajaran dimulai Ibu guru mengkondisikan anak-anak dan memberi penjelasan tentang kegiatan yang akan dilakukan di Area Sains. Pada penelitian hari ketiga ini anak-anak belajar dengan media *Bubble* dengan tujuan dapat menyebutkan bau dari air biasa, air deterjen(rinso), bau sabun cair *Sweetzal*, bau sabun colek Krim Ekonomi, bau sabun cuci tangan *Lifebuoy Handwash*, bau sabun bayi batang merk *Cussons*, dan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

6. Serbet.

Langkah-langkah percobaan ini adalah :

1. Menyiapkan bahan-bahan seperti, deterjen(rinso), sabun cair *Sweetzal*, sabun colek Krim Ekonomi, *Lifebuoy Handwash*, sabun bayi batang merk *Cussons*, dan sampo *Sunsilk*.
2. Menyiapkan air dalam ember ukuran 5 liter.
3. Kemudian anak mengambil air dan dimasukkan ke dalam gelas aqua $\frac{1}{4}$ gelas.
4. Anak diberi kesempatan untuk memasukkan deterjen (rinso) 2 sendok teh, sabun cair sweetzal 2 sendok teh, sabun colek Krim Ekonomi 2 colek, *Lifebuoy Handwash* 2 sendok teh, sabun bayi batang merk *Cussons* yang telah disisir sebanyak 2 sendok teh dan sampo Sunsilk 2 sendok teh ke dalam masing-masing gelas berisi air putih yang telah disediakan.
5. Kemuadian air dalam gelas aqua tersebut diaduk dengan pengaduk kayu dan setelah itu anak bisa mencium satu persatu bau dari masing-masing air sabun

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

hari itu dan perbedaan bau dari masing-masing air sabun dengan bahan deterjen(rinso), sabun cair *Sweetzal*, sabun colek Krim Ekonomi, *Lifebuoy Handwash*, sabun bayi batang merk *Cussons*, dan sampo *Sunsilk*.

Kesimpulan penelitian hari ketiga dengan media *Bubble* adalah bahwa anak dapat mengetahui bahwa air biasa itu tidak berbau, air sabun cair *Sweetzal* lebih wangi daripada air deterjen Rinso, air sampo Sunslik lebih wangi daripada air sabun colek Krim Ekonomi, serta air *Lifebuoy Handwash*, air sabun bayi batang merk *Cussons*, dan air sabun cair merk Sweetzal sama-sama berbau harum.

4.1.2.4 Pelaksanaan Hari Keempat

Pembukaan : Ibu Guru mengkondisikan anak-anak untuk berbaris dan masuk kelas, kemudian berdoa dilanjut dengan menyanyikan lagu “Tomat Buah yang Berguna”. Setelah itu ibu guru memberi pertanyaan kepada anak-anak apa saja makanan yang diciptakan Allah dan buatan manusia. Anak-anak menjawab

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Alat dan bahan yang harus dipersiapkan pada percobaan hari keempat adalah :

1. Air satu ember ukuran 5 liter.
2. Deterjen Rinso.
3. Sabun colek Krim Ekonomi.
4. Piring kecil berdiameter 8 cm.

Langkah-langkah percobaan adalah sebagai berikut :

1. Menyiapkan bahan yang diperlukan seperti deterjen Rinso dan sabun colek Krim Ekonomi.
2. Menuang 5 sendok teh deterjen Rinso dan 5 colek sabun colek Krim Ekonomi ke dalam piring berdiameter 8 cm.
3. Setelah kedua bahan ditaruh di atas piring, ibu guru menyuruh anak untuk meraba dan meremas masing-masing bahan tersebut.
4. Kemudian anak disuruh menyebutkan tekstur dari deterjen Rinso dan sabun colek Krim Ekonomi

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

tangan dan sabun colek Krim Ekonomi bertekstur lembek dan lembut, deterjen Rinso lebih cepat larut di dalam air daripada sabun colek Krim Ekonomi yang dalam proses pelarutannya harus diaduk-aduk terlebih dahulu sampai benar-benar hilang sabunya dan yang terakhir anak dapat menyebutkan gelembung yang dihasilkan paling banyak pada deterjen Rinso.

Kesimpulan penelitian hari keempat pada proses pembelajaran di area sains adalah bahwa anak dapat mengetahui dan menyebutkan deterjen Rinso bertekstur kasar dan terasa panas di tangan dan sabun colek Krim Ekonomi bertekstur lembek dan lembut, deterjen Rinso lebih cepat larut di dalam air daripada sabun colek Krim Ekonomi yang dalam proses pelarutannya harus diaduk-aduk terlebih dahulu sampai benar-benar hilang sabunya dan yang terakhir anak dapat menyebutkan gelembung yang dihasilkan paling banyak pada deterjen Rinso.

4.1.2.5 Pelaksanaan Hari Kelima

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

manusia, serta melakukan percobaan benda-benda yang dapat ditarik magnet (kunci, peniti, staples, kertas, sedotan, paku kecil, gunting, dan penggaris).

Alat dan bahan yang harus dipersiapkan adalah sebagai berikut :

1. Menyiapkan air dalam ember ukuran 5 liter.
2. Sabun batang merk *Cussons* yang telah disisir.
3. Baskom dengan diameter 25 cm 3 buah, yaitu baskom merah (A), baskom kuning (B) dan baskom biru (C).
4. Pewarna makanan berbahan dasar air yang tidak beracun 3 warna (merah, biru dan kuning) dengan merk Rajawali.
5. Gelas aqua ukuran 200cc.
6. Sedotan.
7. Serbet.
8. Pengaduk dari kayu.
9. Sendok teh.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4. Setelah itu masing-masing anak mengambil gelas aqua dan menakar air yang sudah diberi pewarna dengan takaran $\frac{1}{4}$ gelas atau sekitar 25cc warna merah, biru atau kuning sesuai petunjuk guru.
5. Setelah anak memasukkan air berwarna (misal merah, kuning atau biru) ke dalam gelas kemudian anak menakar sabun batang merk *Cussons* yang telah disisir dengan sendok teh sebanyak 2 sendok teh dan mengaduknya dengan pengaduk kayu hingga sabun batang larut dalam air.
6. Setelah itu anak meniup air sabun tersebut dengan sedotan sehingga terbentuk *bubble*/gelembung yang berwarna-warni.
7. Kemudian pada akhir percobaan anak disuruh menceritakan apa yang terjadi jika air sabun ditiup dengan sedotan.

Waktu istirahat digunakan anak-anak untuk makan bekal dan bermain di luar kelas.

Kegiatan penutup : ibu guru bertanya kembali tentang kegiatan yang telah

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

sangat banyak, semakin kuat meniupnya maka akan semakin banyak gelembung yang tercipta.



Gambar 4.6 Anak meniup gelembung dengan warna merah dan hijau

4.1.2.6 Pelaksanaan Hari Keenam

Pembukaan : Ibu guru mengkondisikan anak-anak berbaris di halaman untuk senam pagi. Setelah kegiatan senam selesai, anak –anak melanjutkan

.....

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

masih mengalami kesulitan dalam meniup baoln sehingga masih dibantu ibu guru dalam meniup balon.

Alat dan bahan yang harus dipersiapkan adalah sebagai berikut :

1. Menyiapkan air dalam ember ukuran 5 liter.
2. Sabun bayi cair merk *Sweetzal*.
3. Baskom dengan diameter 25 cm 3 buah (baskom merah (A), baskom kuning (B) dan baskom biru (C).
4. Pewarna makanan berbahan dasar air yang tidak beracun 3 warna (merah, biru dan kuning) dengan merk Rajawali.
5. Gelas aqua ukuran 200cc.
6. Sedotan.
7. Serbet.
8. Pengaduk dari kayu.
9. Sendok teh.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4. Setelah itu masing-masing anak mengambil gelas aqua dan menakar air yang sudah diberi pewarna dengan takaran $\frac{1}{4}$ gelas atau 25 cc warna (merah+biru, kuning+biru =hijau dan merah+biru=ungu) sesuai petunjuk guru.
5. Anak mengamati hasil pencampuran warna tersebut.
6. Setelah anak mencampur warna kemudian menakar sabun bayi cair merk *Sweetzal* 2 sendok teh ke dalam air campuran warna tersebut.
7. Setelah itu anak meniup air sabun tersebut dengan sedotan sehingga terbentuk *bubble*/gelembung yang berwarna-warni.
8. Kemudian pada akhir percobaan anak menceritakan alur proses pembuatan bubble dengan bahan dasar sabun bayi cair merk *Sweetzal* dengan bahasa anak yang sederhana.

Waktu istirahat digunakan anak-anak untuk makan bekal dan bermain bersama teman-teman.

Kegiatan penutup : ibu guru bertanya kembali tentang kegiatan yang telah

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

pembuatan bubble/gelembung dengan sabun bayi cair merk *Sweetzal*, yaitu mulai dari menyiapkan air, memasukkan air ke dalam gelas aqua, mencampur warna (merah+kuning=orange, kuning+biru=hijau dan merah+biru=ungu), menambah campuran warna dasar dengan sabun bayi merk *Sweetzal*, mengaduk dengan pengaduk kayu, dan meniup air sabun hingga terbentuk *bubble*.



Gambar 4.7 anak mencampur warna merah+kuning=orange



We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4.1.2.7 Pelaksanaan Hari Ketujuh

Pembukaan : ibu mengkondisikan anak-anak untuk berbaris dan upacara bendera. Setelah selesai upacara anak-anak masuk kelas, kemudian berdoa dilanjutkan dengan melakukan kegiatan fisik motorik dengan menunjuk gerakan duduk, jongkok, berdiri dan berlari setelah itu anak-anak berlatih drumband. Setelah itu ibu guru memberi pertanyaan kepada anak-anak tentang alat-alat kebersihan. Anak-anak sangat bersemangat menjawab pertanyaan dari ibu guru. Mereka menjawab dengan bahasa yang sederhana.

Kegiatan inti : di Area Sains anak-anak masih tetap belajar dengan media *Bubble*, yaitu anak diharapkan mampu bercerita tentang kegiatan yang telah dilakukan (mencampur warna dasar, menakar sampo *Sunsilk*, meniup gelembung, dan mencipta lukisan gelembung. Selain itu kegiatan lainnya anak menarik garis alat-alat kebersihan sesuai dengan pasangannya.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

7. Serbet.
8. Pengaduk dari kayu.
9. Sendok teh.

Langkah-langkah pembuatan *bubble*/gelembung dengan bahan dasar Sampo *Sunsilk* :

1. Menyiapkan air putih dalam ember yang berukuran 5 liter dimasukkan ke dalam 3 buah baskom merah (A), baskom kuning (B) dan baskom (C) dengan diameter 25 cm sama banyak.
2. Kemudian memasukkan 3 botol pewarna makanan ke dalam baskom dengan warna yang berbeda-beda, baskom merah (A) untuk warna merah, baskom kuning (B) untuk warna kuning dan baskom biru (C) untuk warna biru.
3. Mengaduk air yang sudah dicampur pewarna dengan pengaduk kayu.
4. Setelah itu masing-masing anak mengambil gelas aqua dan menakar air yang sudah diberi pewarna dengan takaran $\frac{1}{4}$ gelas atau sekitar 25cc warna

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

9. Anak mengangkat kertas HVS tadi kemudian mengamati hasil lukisan yang tercipta pada kertas HVS itu.

10. Pada kertas HVS tercipta lukisan gelembung dengan warna orange, hijau dan ungu.

Waktu istirahat digunakan anak-anak untuk bermain di luar kelas dan makan bekal.

Kegiatan penutup dilakukan dengan menunjukan hasil karya anak-anak di depan kelas. Guru memberi motivasi pada anak-anak yang hasil karyanya kurang bagus agar lain waktu bisa lebih bagus lagi.

Kesimpulan penelitian hari ketujuh pada proses pembelajaran dengan media *Bubble* adalah bahwa anak mampu bercerita tentang kegiatan yang telah dilakukan mencampur warna dasar, menakar sampo Sunsilk dengan sendok teh, meniup gelembung, dan mencipta lukisan gelembung.



We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)



Gambar 4.10 Anak menutup gelas Aqua dengan kertas HVS



We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link;

however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Setelah selesai ekstra menari anak-anak belajar kembali. Kemudian itu ibu guru memberi pertanyaan kepada anak-anak tentang peralatan mandi. Anak-anak sangat bersemangat menjawab “sabun, handuk, sikat gigi, pasta gigi, sampo.”

Kegiatan inti : di Area Sains anak-anak masih tetap belajar dengan media *Bubble* yaitu anak diharapkan dapat menyebutkan benda-benda yang yang digunakan saat bermain *bubble*/gelembung beserta fungsinya (air, sabun, sendok, gelas aqua, pewarna, sedotan, pengaduk, dan kertas. Selain itu anak juga mengukur panjang meja dengan tali, mengukur lemparan dengan langkah dan menggunting bentuk geometri dengan daun pisang.

Waktu istirahat digunakan anak-anak untuk bermain di luar kelas dan makan bekal.

Kegiatan penutup dilakukan dengan menunjukan hasil karya anak-anak di depan kelas. Guru memberi motivasi pada anak-anak yang hasil karyanya kurang

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dengan merangkak mengambil. Setelah itu ibu guru memberikan penjelasan akan pentingnya menjaga kesehatan badan terutama gigi.

Kegiatan inti : di Area Sains anak-anak masih tetap belajar dengan media *Bubble*, yaitu anak dapat menyebutkan hasil pencampuran warna (merah+kening = orange, merah+biru = ungu dan biru+kuning = hijau). Selain itu anak juga belajar melukis tempat sampah dengan jari serta melakukan eksperimen tangan berkeringat (telapak tangan dibungkus plastik).

Waktu istirahat digunakan anak-anak untuk bermainj di luar kelas dan makan bekal.

Kegiatan penutup dilakukan dengan menunjukan hasil karya anak-anak di depan kelas. Guru memberi motivasi pada anak-anak yang hasil karyanya kurang bagus agar lain waktu bisa lebih bagus lagi.

Kesimpulan penelitian hari kesepuluh pada proses pembelajaran di area

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Kegiatan inti : di Area Sains anak-anak masih tetap belajar dengan media *Bubble*, yaitu anak diharapkan dapat mengetahui konsep penuh-kosong dengan memasukkan air ke dalam gelas yang berbeda pada percobaan dengan media *bubble* mewarnai gambar yang jumlahnya lebih banyak dan lebih sedikit, serta menggambar bebas membuat pasta gigi dan sikat gigi dengan arang.

Waktu istirahat digunakan anak-anak untuk bermainj di luar kelas dan makan bekal.

Kegiatan penutup dilakukan dengan menunjukan hasil karya anak-anak di depan kelas. Guru memberi motivasi pada anak-anak yang hasil karyanya kurang bagus agar lain waktu bisa lebih bagus lagi.

Kesimpulan penelitian hari kesepuluh pada proses pembelajaran di area sains adalah bahwa anak dapat mengetahui konsep penuh-kosong dengan memasukkan air ke dalam gelas yang berbeda pada percobaan dengan media

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

sendok melihat benda-benda kecil dengan kaca pembesar/lup serta menabur gambar pos kamling dengan abu.

Waktu istirahat digunakan anak-anak untuk bermainj di luar kelas dan makan bekal.

Kegiatan penutup dilakukan dengan menunjukan hasil karya anak-anak di depan kelas. Guru memberi motivasi pada anak-anak yang hasil karyanya kurang bagus agar lain waktu bisa lebih bagus lagi.

Kesimpulan penelitian hari kesebelas pada proses pembelajaran di area sains adalah bahwa anak dapat mengetahui konsep banyak sedikit dengan memasukkan air ke berwarna ke dalam gelas aqua dan menakar deterjen dengan sendok.

4.1.2.12 Pelaksanaan Hari Keduabelas

Pembukaan : ibu mengkondisikan anak-anak untuk berbaris dan senam

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

[Customize Your Choices](#)

[Accept All](#)

[Reject All](#)

Kegiatan penutup dilakukan dengan menunjukan hasil karya anak-anak di depan kelas. Guru memberi motivasi pada anak-anak yang hasil karyanya kurang bagus agar lain waktu bisa lebih bagus lagi.

Kesimpulan penelitian hari kedua belas pad proses pembelajaran di area sains adalah bahwa anak dapat menyebutkan hasil dari meniup bubble yang terlihat di kertas HVS.

4.1.4 Kesimpulan Kumulatif dari Proses Pembelajaran dengan *Bubble* sebagai Media Pembelajaran Sains Sederhana

Dalam permainan *bubble*, di dalamnya terdapat unsur kegiatan pencampuran warna dasar/primer sehingga dapat menghasilkan warna baru, pengukuran (menakar) deterjen, pengenalan karakteristik zat (cair, padat, dan gas).

Mencampur warna kuning, merah, atau biru dapat menciptakan warna lain

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

masalah. Pengalaman yang diperoleh anak dapat menambah kemampuan bereksplorasi, hal ini penting untuk perkembangan kognitif anak, dan ini terbukti dengan terlihat indikator pada anak sudah muncul.

Sabun dan deterjen adalah bagian integral dari produk rumah tangga. Sementara itu, anak-anak suka mandi busa, mereka pasti akan menyukai ide membuat gelembung sabun di rumah, tanpa membeli sesuatu dari luar. Cara membuat gelembung dengan derjen Rinso, sabun bayi cair, sabun batang, sabun cuci piring atau sampo, hal yang menarik untuk belajar.

4.1.5 Hasil Pengamatan Menggunakan Ceklist

Terkait masalah yang melatar belakangi pada penelitian ini maka direncanakan suatu studi eksperimen dengan menggunakan *Bubble* sebagai media pembelajaran sains sederhana untuk meningkatkan kemampuan kognitif anak

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

bisa lebih cepat memahami materi. Jumlah siswa yang diteliti sebanyak 24 siswa, 8 perempuan dan 16 laki-laki. Untuk lebih jelas mengenai hasil pengamatan dengan menggunakan daftar isian ceklist dalam penelitian ini dapat dilihat pada pembahasan berikut:

4.1.5.1 Minggu Pertama

4.1.5.1.1 Kelompok *Posttest* (Siswa Sesudah mendapat Media *Bubble*)

4.1.5.1.1.1 Pengetahuan Umum dan Sains dan Konsep Bentuk, Warna, Ukuran dan Pola

Tabel 4.1

Perolehan Skor pada Aspek Perkembangan untuk Indikator

Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola

Kelompok *Posttest* (Anak didik sesudah mendapat Media *Bubble*)

No	Indikator	Skor	Jml	Skor	Skor	Persentase
----	-----------	------	-----	------	------	------------

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

	ditiup dengan sedotan							
6.	Menceritakan percobaan warna yang dicampur	10	7	7	24	51	72	70.83
7.	Menceritakan kembali sesuatu/peristiwa berdasarkan ingatannya	12	7	5	24	55	72	76.39
8.	Menyebutkan sedikitnya 6 benda berikut fungsinya	5	6	13	24	40	72	55.56
9.	Menyebutkan hasil pencampuran warna (merah+kening = orange, merah+biru = ungu dan biru+kuning = hijau)	9	5	10	24	47	72	65.28
10.	Membedakan konsep penuh-kosong dengan mengisi wadah(gelas)	10	4	10	24	48	72	66.67
11.	Membedakan konsep banyak-sedikit	8	11	5	24	51	72	70.83
12	Anak dapat menyebutkan							

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

$$\begin{aligned} DP &= \frac{n}{N} \times 100\% \\ &= \frac{586}{864} \times 100\% \\ &= 67.82\% \end{aligned}$$

Dari hasil perhitungan di atas diperoleh persentase skor sebesar 67.82%. Hasil skor tersebut kemudian diinterpretasikan sebagaimana digambarkan pada tabel 1 (Bab 3) skor 67.82%.termasuk dalam interval skor 55,01%-77,01% dengan kategori cukup baik. Berikut penulis sajikan distribusi frekuensi untuk menghitung mean atau rata-rata skor untuk dimensi pengetahuan umum dan sains yaitu :

Tabel. 4.2

Distribusi Frekwensi Skor pada Aspek Perkembangan untuk Indikator Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola Kelompok *Posttest* (Anak didik sesudah mendapat Media *Bubble*)

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Dari tabel 4.2 di atas dapat diketahui mean atau rata-rata skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola yaitu :

$$\begin{aligned}\text{Mean} &= \frac{f \times ni}{f} \\ &= \frac{576}{12} \\ &= 48\end{aligned}$$

Dari perhitungan skor yang sudah dijelaskan pada BAB 3 bahwa skor terendah 40 dan skor tertinggi 72. Jadi rata-rata atau mean dari skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola sebesar 48 dimensi skor lebih mendekati angka 50 (skor minimal). Dengan demikian pengembangan media *Bubble* untuk kelompok *posttest* pada aspek pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola cukup baik.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4.1.5.1.2 Kelompok *Pretest*

4.1.5.1.2.1 Pengetahuan Umum dan Sains dan Konsep Bentuk, Warna, Ukuran dan Pola

Tabel 4.3
Perolehan Skor pada Aspek Perkembangan untuk Indikator
Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola
Kelompok *Pretest* (Anak didik sebelum mendapat *Media Bubble*)

No	Indikator	Skor			Jml Siswa	Skor diperoleh	Skor maks.	Persentase (%)
		3	2	1				
1.	Mengelompokkan warna dasar (merah, kuning dan biru)	4	7	13	24	39	72	54.17
2.	Mengelompokkan benda berdasarkan bentuk	6	7	11	24	43	72	59.72

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

9.	Menyebutkan sedikitnya 6 benda berikut fungsinya	5	6	13	24	40	72	55.56
10.	Menyebutkan hasil pencampuran warna (merah+kening = orange, merah+biru = ungu dan biru+kuning = hiaju)	3	5	16	24	35	72	48.61
11.	Membedakan konsep penuh-kosong dengan mengisi wadah(gelas)	7	4	13	24	42	72	58.33
12.	Membedakan konsep banyak-sedikit	7	3	14	24	41	72	56.94
	Anak dapat menyebutkan bentuk dari hasil lukisan bubble	2	8	14	24	36	72	50.00
	JUMLAH	59	67	162		473	864	54.75

Untuk mengetahui sejauh mana tingkat pengetahuan umum dan sains,

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

digambarkan pada tabel 1 (Bab 3) skor 54.75% termasuk dalam interval skor 33,00%-55,01% dengan kategori kurang baik. Berikut penulis sajikan distribusi frekuensi untuk menghitung mean atau rata-rata skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola yaitu:

Tabel. 4.4
Distribusi Frekuensi Skor pada Aspek Perkembangan untuk Indikator
Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola
Kelompok *Pre-test* (Anak didik sebelum mendapar Media *Bubble*)

Skor	Frekuensi (f)	Nilai Tengah (ni)	f x ni
33-36	3	34.5	103.5
37-40	3	38.5	115.5
41-44	6	42.5	255
Jumlah	12		474

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola sebesar 39.50 dimensi skor kurang mendekati angka 50 (skor minimal). Dengan demikian pengembangan media *Bubble* untuk kelompok *pretest* pada aspek pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola kurang baik.

4.1.5.2 Minggu Kedua

4.1.5.2.1 Kelompok *Posttest*

4.1.5.2.1.1 Pengetahuan Umum dan Sains dan Konsep Bentuk, Warna, Ukuran dan Pola

Tabel 4.5
Perolehan Skor pada Aspek Perkembangan untuk Indikator
Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola
Kelompok *Posttest* (Anak didik sesudah mendapat Media *Bubble*)

No	Indikator	Skor	Jml	Skor	Skor	Persentase
----	-----------	------	-----	------	------	------------

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

	ditiup dengan sedotan							
6.	Menceritakan percobaan warna yang dicampur	11	10	3	24	56	72	77.78
7.	Menceritakan kembali sesuatu/peristiwa berdasarkan ingatannya	12	9	3	24	57	72	79.17
8.	Menyebutkan sedikitnya 6 benda berikut fungsinya	11	9	3	23	54	69	78.26
9.	Menyebutkan hasil pencampuran warna (merah+kening = orange, merah+biru = ungu dan biru+kuning = hijau)	11	8	5	24	54	72	75.00
10.	Membedakan konsep penuh-kosong dengan mengisi wadah(gelas)	13	8	3	24	58	72	80.56
11.	Membedakan konsep banyak-sedikit	10	11	3	24	55	72	76.39
12.	Anak dapat menyebutkan							

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link;

however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

$$\begin{aligned} DP &= \frac{n}{N} \times 100\% \\ &= \frac{671}{864} \times 100\% \\ &= 77.66\% \end{aligned}$$

Dari hasil perhitungan di atas diperoleh persentase skor sebesar 77.66%. Hasil skor tersebut kemudian diinterpretasikan sebagaimana digambarkan pada tabel 1 (Bab 3) skor 77.66%.termasuk dalam interval skor 77,01%-100% dengan kategori sangat baik. Berikut penulis sajikan distribusi frekuensi untuk menghitung mean atau rata-rata skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola yaitu :

Tabel. 4.6

**Distribusi Frekuensi Skor pada Aspek Perkembangan untuk Indikator
Pengetahuan Umum dan Sains, Konsep Bentuk, Warna, Ukuran dan Pola
Kelompok *Posttest* (Anak didik sesudah mendapat *Media Bubble*)**

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

$$\begin{aligned} \text{Mean} &= \frac{fxni}{f} \\ &= \frac{675}{12} \\ &= 56.25 \end{aligned}$$

Dari perhitungan skor yang sudah dijelaskan pada BAB 3 bahwa skor terendah 54 dan skor tertinggi 72. Jadi rata-rata atau mean dari skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola sebesar 56.25 dimensi skor lebih mendekati angka 50 (skor minimal). Dengan demikian pengembangan media *Bubble* untuk kelompok *posttest* pada aspek pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola baik.

4.1.5.2.2 Kelompok *Pretest*

4.1.5.2.2.1 Pengetahuan Umum dan Sains dan Konsep Bentuk, Warna, Ukuran dan Pola

Tabel 4.7

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

3.	Mengetahui bau dari suatu benda	7	8	9	24	46	72	63.89
4.	Membedakan konsep kasar-halus melalui panca indera	6	3	16	25	40	75	53.33
5.	Menceritakan apa yang terjadi jika air deterjen ditiup dengan sedotan	3	6	15	24	36	72	50.00
6.	Menceritakan percobaan warna yang dicampur	6	7	11	24	43	72	59.72
7.	Menceritakan kembali sesuatu/peristiwa berdasarkan ingatannya	4	3	17	24	35	72	48.61
8.	Menyebutkan sedikitnya 6 benda berikut fungsinya	5	6	13	24	40	72	55.56
9.	Menyebutkan hasil pencampuran warna (merah+kening = orange, merah+biru = ungu dan biru+kuning = hiaju)	3	5	16	24	35	72	48.61

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

ideal atau skor maksimal yang diperoleh dari tabel dengan menggunakan perhitungan rumus 1.

$$\begin{aligned} DP &= \frac{n}{N} \times 100\% \\ &= \frac{480}{867} \times 100\% \\ &= 55.36\% \end{aligned}$$

Dari hasil perhitungan di atas diperoleh persentase skor sebesar 55.36%. Hasil skor tersebut kemudian diinterpretasikan sebagaimana digambarkan pada table 1 (Bab 3) skor 55.36%. termasuk dalam interval skor 55,01%-77,01% dengan kategori cukup baik. Berikut penulis sajikan distribusi frekuensi untuk menghitung mean atau rata-rata skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola yaitu :

Tabel. 4.8

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)
[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Dari tabel 4.8 di atas dapat diketahui mean atau rata-rata skor untuk dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola yaitu :

$$\begin{aligned} \text{Mean} &= \frac{fxni}{f} \\ &= \frac{486}{12} \\ &= 40.50 \end{aligned}$$

Dari perhitungan skor yang sudah dijelaskan pada BAB 3 bahwa skor terendah 35 dan skor tertinggi 72. Jadi rata-rata atau mean dari skor untuk dimensi pengetahuan umum dan sains sebesar 40.50 dimensi skor kurang mendekati angka 50 (skor minimal). Dengan demikian pengembangan media *Bubble* untuk kelompok *pre-test* pada aspek pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola kurang baik.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Mencampur warna kuning, merah, atau biru dapat menciptakan warna lain seperti orange, hijau, dan ungu. Melalui pencampuran warna ini anak dapat menjelaskan warna apa yang digunakan dan warna apa yang tampak pada kertas. Hal ini dapat menjadi dasar pengetahuan anak tentang warna primer dan warna sekunder. Mencampurkan satu warna dengan warna yang lain dapat menciptakan warna baru.

Bubble atau melukis gelembung merupakan salah satu media pembelajaran sains yang bertujuan merangsang anak untuk berfikir tentang bahan-bahan dan karakter gelembung. Pengalaman seperti ini akan membuat anak mulai memahami bahwa udara menempati ruang, walaupun tidak terlihat nyata. Kegiatan ini dapat meningkatkan perkembangan kognitif dan motorik anak usia dini. Pengalaman yang diperoleh anak dari dapat menambah kemampuan bereksplorasi yang penting untuk perkembangan kognitif anak.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

mengontrol pernapasan, memegang sedotan melatih kemampuan mencengkeram yang pada dasarnya cukup sulit dilakukan untuk tangan kecil anak.

Dalam permainan *Bubble*, di dalamnya terdapat unsur kegiatan pencampuran warna dasar atau primer sehingga dapat menghasilkan warna baru, pengukuran (menakar) deterjen, pengenalan karakteristik zat (cair, padat, dan gas). Pengalaman yang diperoleh anak dapat menambah kemampuan bereksplorasi yang penting untuk perkembangan kognitif anak, ini terbukti dengan terlihat indikator pada anak sudah muncul.

Penggunaan media, dalam hal ini media *bubble* memberikan dampak positif bagi kemampuan kognitif anak, hal ini bisa dilihat dari penjabaran indikator yang dipergunakan dalam penelitian ini yaitu : 1) anak dapat mengenal dan menyebutkan warna dasar seperti merah, kuning dan biru serta dapat menyebutkan minuman yang berwarna-warni seperti sirup, 2) anak dapat

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

dahulu sampai benar-benar hilang sabunya dan yang terakhir anak dapat menyebutkan gelembung yang dihasilkan paling banyak pada deterjen Rinso, 5) anak dapat menceritakan yang terjadi ketika air sabun batang merk *Cussons* ditiup dengan sedotan akan tercipta *bubble*/gelembung yang sangat banyak, semakin kuat meniupnya maka akan semakin banyak gelembung yang tercipta, 6) anak dapat menceritakan kembali urutan proses pembuatan *bubble*/gelembung dengan sabun bayi cair merk *Sweetzal*, yaitu mulai dari menyiapkan air, memasukkan air ke dalam gelas aqua, mencampur warna (merah+kuning=orange, kuning+biru=hijau dan merah+biru=ungu), menambah campuran warna dasar dengan sabun bayi merk *Sweetzal*, mengaduk dengan pengaduk kayu, dan meniup air sabun hingga terbentuk *bubble*, 7) anak mampu bercerita tentang kegiatan yang telah dilakukan mencampur warna dasar, menakar sampo *Sunsilk* dengan sendok teh, meniup gelembung, dan mencipta lukisan gelembung, 8)

Anak dapat menyebutkan benda-benda yang digunakan saat bermain

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

pertama menjadi 77.66% untuk minggu kedua. Ini berarti ada ketertarikan anak pada proses pembelajaran menggunakan media *bubble*. Indikator tersebut mencakup aspek perkembangan pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola.

Pembelajaran media *Bubble* merupakan salah satu alternatif dalam proses pembelajaran di kelas dengan menggunakan media sebagai alat peraga. Pembelajaran media *Bubble* merupakan cara efektif untuk mengenalkan anak untuk melihat hasil percobaan secara langsung. Anak dapat melihat dan mempraktekkan kegiatan secara langsung seperti (meniup menggunakan sedotan) dapat menimbulkan reaksi pada lukisannya (terciptanya gelembung). Pada saat anak meniup air sabun, mereka dapat membuat bentuk gelembung dengan cara menekan kertas sehingga tercipta suatu lukisan.

Selain itu anak juga dapat mengembangkan kemampuan motorik halus nya

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

anak tumbuh dan berkembang dengan baik serta dapat memperluas wawasan anak tentang sains sederhana pada saat tahap perkembangan kemampuan menganalisa, berkomunikasi dan memecahkan masalah.

Berdasarkan diuraikan diatas, maka dalam penelitian ini terbukti bahwa proses pembelajaran media *bubble* dengan pembelajaran sains sederhana dapat meningkatkan kemampuan kognitif anak usia 4-5 tahun di area sains di TK Pertiwi 49 Semarang.

4.1.7 Hasil Kemampuan Kognitif Anak Usia 4-5 Tahun Di Area Sains

4.1.7.1 Perbedaan Kemampuan Kognitif Anak Didik Kelompok *Posttest* dan Kelompok *Pretest*

4.1.7.1.1 Minggu Pertama

Dari hasil analisis perhitungan pada tabel 4.1 dan 4.2 di atas dapat disimpulkan bahwa perolehan persentase skor dimensi pengetahuan umum dan

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Untuk analisis perhitungan pada tabel 4.3 dan 4.4 atas dapat disimpulkan bahwa perolehan persentase skor dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola sebesar 54.75%, dengan rata-rata atau mean sebesar 39.5. Hasil skor tersebut kemudian diinterpretasikan sebagaimana digambarkan pada tabel 1 Bab 3 skor 54.75%. termasuk dalam interval skor 33,01%-55,01% dengan kategori kurang baik. Hasil rata-rata atau mean dimensi skor kurang mendekati angka 50 (skor minimal) dengan kategori kurang baik. Sehingga dapat disimpulkan bahwa kelompok *pretest* kemampuan kognitif pada anak usia 4-5 tahun khusus di area sains memperoleh hasil yang kurang baik untuk minggu pertama.

Hasil Perbandingan Perolehan Skor Kemampuan Kognitif Siswa Kelompok *Posttest* dan Kelompok *Pretest* untuk minggu pertama disajikan dalam grafik dibawah ini :

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

4.1.7.1.2 Minggu Kedua

Dari hasil analisis perhitungan pada tabel 4.5 dan 4.6 atas dapat disimpulkan bahwa perolehan persentase skor dimensi pengetahuan umum dan sains, konsep bentuk, warna, ukuran dan pola sebesar 77.66%, dengan rata-rata atau mean sebesar 56.25. Hasil skor tersebut kemudian diinterpretasikan sebagaimana digambarkan pada tabel 1 bab 3 skor 77.66%. termasuk dalam interval skor 77,01%-100% dengan kategori sangat baik. Hasil rata-rata atau mean dimensi skor lebih mendekati angka 50 (skor minimal) dengan kategori baik. Sehingga dapat disimpulkan bahwa kelompok *posttest* kemampuan kognitif pada anak usia 4-5 tahun khusus di area sains memperoleh hasil yang sangat baik untuk minggu kedua

Untuk analisis perhitungan pada tabel 4.7 dan 4.8 atas dapat disimpulkan bahwa perolehan persentase skor dimensi pengetahuan umum dan sains, konsep

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Hasil Perbandngan Perolehan Skor Kemampuan Kognitif Siswa Kelompok *Posttest* dan Kelompok *Pretest* untuk minggu kedua disajikan dalam grafik dibawah ini :



Grafik 4.2

Perbandingan Perolehan Skor Kemampuan Kognitif Siswa

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link;

however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

sebagai penyampai pesan dari guru kepada anak didik agar pesan/informasi tersebut dapat diterima atau diserap anak dengan baik.

Menurut Carin dan Sund dalam Yulianti mendefinisikan sains sebagai pengetahuan yang sistematis atau tersusun secara teratur, berlaku umum, dan berupa kumpulan data hasil observasi dan eksperimen. Aktivitas dalam sains selalu berhubungan dengan percobaan-percobaan yang membutuhkan keterampilan dan kerajinan. Secara sederhana, sains dapat juga didefinisikan sebagai apa yang dilakukan oleh para ahli sains. Dengan demikian, sains bukan hanya kumpulan pengetahuan tentang benda atau makhluk hidup, tetapi menyangkut cara kerja, cara berpikir, dan cara memecahkan masalah. Ilmuwan sains selalu tertarik dan memperhatikan peristiwa alam, selalu ingin mengetahui apa, bagaimana, dan mengapa tentang suatu gejala alam dan hubungan kausalnya. Ini bisa dilakukan kalau dalam proses pembelajarannya menggunakan media.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

BAB 5
PENUTUP

5.1 SIMPULAN

Berdasarkan hasil penelitian dan pembahasan dapat disimpulkan sebagai berikut :

5.1.1. Penggunaan media, dalam hal ini media *bubble* memberikan dampak positif bagi kemampuan kognitif anak, hal ini bias dilihat dari penjabaran indikator yang dipergunakan dalam penelitian ini yakni : 1) anak dapat mengenal dan menyebutkan warna dasar seperti merah, kuning dan biru serta dapat menyebutkan minuman yang berwarna-warni seperti sirup, 2) anak dapat menyebutkan bentuk-bentuk geometri yang tercipta ketika *bubble*/gelembung ditaruh di tengah susunan lidi yang berbentuk segitiga,

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

menyebutkan gelembung yang dihasilkan paling banyak pada deterjen Rinso, 5) anak dapat menceritakan yang terjadi ketika air sabun batang merk *Cussons* ditiup dengan sedotan akan tercipta *bubble*/gelembung yang sangat banyak, semakin kuat meniupnya maka akan semakin banyak gelembung yang tercipta, 6) anak dapat menceritakan kembali urutan proses pembuatan *bubble*/gelembung dengan sabun bayi cair merk *Sweetzal*, yaitu mulai dari menyiapkan air, memasukkan air ke dalam gelas aqua, mencampur warna (merah+kuning=orange, kuning+biru=hijau dan merah+biru=ungu), menambah campuran warna dasar dengan sabun bayi merk *Sweetzal*, mengaduk dengan pengaduk kayu, dan meniup air sabun hingga terbentuk *bubble*, 7) Anak mampu bercerita tentang kegiatan yang telah dilakukan mencampur warna dasar, menakar sampo *Sunsilk* dengan sendok teh, meniup gelembung, dan mencipta lukisan gelembung, 8) Anak

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

pemahaman anak meningkat. Ini berarti ada ketertarikan anak pada proses pembelajaran menggunakan dengan media *bubble*. Indikator tersebut mencakup aspek perkembangan pengetahuan umum dan sains, serta konsep bentuk, warna, ukuran dan pola.

5.1.2. Hasil penggunaan media *Bubble* dalam konsep pengetahuan dan *sains* serta konsep bentuk, ukuran, warna dan pola di minggu pertama pada kelompok *posttest* mencapai 67.82% kategori cukup baik, dengan mean atau rata-rata 48 kategori cukup baik. Sedangkan tingkat kemampuan kognitif anak didik pada kelompok *pretest* hanya mencapai 54.75% kategori kurang baik, dengan mean/rata-rata 39.5 kategori kurang baik. Selanjutnya hasil penggunaan media di minggu kedua pada kelompok *posttest* mencapai 77.66% kategori sangat baik, dengan mean atau rata-rata 56 kategori baik. Sedangkan tingkat kemampuan kognitif anak didik pada kelompok *pretest*

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

5.2 SARAN

Dari hasil penelitian, ada beberapa hal yang dapat peneliti rekomendasikan, diantaranya(1) Bagi guru/pendidik sebaiknya dalam proses pembelajaran seorang guru/pendidik tidak hanya mengandalkan dari sedikit literatur misalnya majalah saja tetapi diharapkan ada banyak referensi literatur dalam menyajikan media pembelajaran agar ketertarikan siswa bisa muncul dalam proses pembelajaran, (2) Diharapkan guru lebih kreatif lagi dalam menggunakan media pembelajaran, khususnya dalam penggunaan media *Bubble* yang tujuannya untuk meningkatkan kemampuan kognitif anak di area sains, (3) penggunaan media *Bubble* bisa dijadikan alternatif dalam pemilihan media pembelajaran sains sederhana di area sains.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

DAFTAR PUSTAKA

- Arikunto, Suharsimi. 2010 *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta : Rineka Cipta.
- Daryanto. 2010. *Media Pembelajaran Peranannya Sangat Penting dalam Mencapai Tujuan Pembelajaran*. Yogyakarta : Gava Media.
- Diana. 2009. *Metode Perkembangan Kognitif dan Kreativitas*. Bahan Ajar. Semarang: UNNES.
- Gardner, Howard. 2003. *Multiple Intellegencies Kecerdasan Majemuk Teori dalam. Praktik* Terjemahan Alexander Sindoro. Judul Asli : Multiple Intelligences. Jakarta: Interaksara.
- Hurlock, Elizabeth B. 1978. *Perkembangan Anak Jilid 2*. Jakarta : Erlangga.
- Indrawati, Ing. 2011. *Studi Eksperimen Tentang Penggunaan Media Realita dan Replika Terhadap Kemampuan Dasar Berbahasa Anak*. Skripsi. PGPAUD. UNNES.
- Jatmika, Yusep Nur. 2012. *Ragam Aktivitas Harian Untuk Playgroup*. Yogyakarta :Diva Press.
- Patmonodewo, Soemiarti. 1995. *Pendidikan Anak Prasekolah*. Jakarta :Rineka Cipta

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

Sukardi. 2003. *Metodologi Penelitian Pendidikan Kompetensi dan Praktiknya*. Jakarta : PT. Bumi Aksara.

Pendidikan dan Pelatihan Guru (PLPG) Sertifikasi Guru dalam Jabatan Tahun 2008 Taman Kanak-kanak. Semarang : Universitas Negeri Semarang.

Sudibyo, Bambang. 2009. *Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 58 Tahun 2009 tentang Standar Pendidikan Anak Usia Dini*. Jakarta: Departemen Pendidikan Nasional.

Sujiono, Yuliani Nurani. 2009. *Konsep Dasar Pendidikan Anak Usia Dini*. Jakarta: PT. Indeks.

Suyanto, Slamet. *Pengenalan Sains untuk Anak TK dengan Pendekatan “Open Inquiry”*. Diunduh dari <http://www.Journal.Pengenalan Sains> untuk Anak TK dengan Pendekatan Inquiry.pdf.30/5/2012.

Permatasari, Dewi Ayu. 2011. *Pengembangan Media Pembelajaran Berbasis Alam Sekitar untuk Meningkatkan Kemampuan Kognitif Anak Usia 5-6 Tahun di TK Pertiwi Jatibarang Brebes*. Semarang : Universitas Negeri Semarang.

Waluyo, Edi. 2006. *Pemanfaatan Media dan Sumber Belajar dalam Pembelajaran di Taman Kanak-Kanak*. Bahan Ajar. Semarang : Universitas Negeri Semarang.

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All

<http://www.slametsuyanto.blogspot.com/Pengenalan-Sains-untuk-Anak-TK--dengan-Pendekatan-Inquiry.pdf>

<http://www.wahyuti4tklarasati.blogspot.com/2011/11/journal.karakteristik-anak-usia-dini.html>

<http://id.shvoong.com/social-sciences/psychology/1958683-multiple-intelligences-kecerdasan-majemuk-teori/#ixzz2L9ANmYPU>

We and our 21 IAB TCF partners store and access information on your device for the following purposes: store and/or access information on a device, advertising and content measurement, audience research, and services development, personalised advertising, and personalised content.

Personal data may be processed to do the following: use precise geolocation data and actively scan device characteristics for identification.

Our third party IAB TCF partners may store and access information on your device such as IP address and device characteristics. Our IAB TCF Partners may process this personal data on the basis of legitimate interest, or with your consent. You may change or withdraw your preferences at any time by clicking on the cookie icon or link; however, as a consequence, you may not see relevant ads or personalized content.

Our website may use these cookies to:

- Measure the audience of the advertising on our website, without profiling
- Display personalized ads based on your navigation and your profile
- Personalize our editorial content based on your navigation
- Allow you to share content on social networks or platforms present on our website
- Send you advertising based on your location

[Privacy Policy](#)

[Third Parties](#)

Customize Your Choices

Accept All

Reject All