

APPENDICES

Appendix 1 The Special Education Curriculum for Students with ASD based on Indonesian Merdeka Curriculum

<div data-bbox="215 343 1281 371">guru.kemdikbud.go.id/kurikulum/referensi-penerapan/capaian-pembelajaran/slb/bahasa-inggris/fase-a/</div> <div data-bbox="600 397 1547 1241"><div data-bbox="600 397 1547 611"><div data-bbox="629 411 824 443">← CP & ATP</div><div data-bbox="618 488 1153 533">Fase A (Usia mental ≤ 7 tahun)</div><div data-bbox="618 552 813 587">Bahasa Inggris</div><div data-bbox="1480 491 1518 531">↗</div></div><div data-bbox="600 611 1547 687"><div data-bbox="754 630 920 659">Rumusan CP</div><div data-bbox="1234 630 1386 659">Contoh ATP</div></div><div data-bbox="618 732 844 767">Capaian Umum</div><div data-bbox="618 807 1523 1212"><p>Pada Fase A, peserta didik memahami bahwa bahasa Inggris lisan dapat membantu mereka berinteraksi dengan orang lain dalam situasi sosial sehari-hari dan konteks kelas. Di dalam mengembangkan keterampilan menyimak dan berbicara, peserta didik mengikuti/merespon instruksi atau pertanyaan sederhana dalam bahasa Inggris dan membagikan informasi dengan kosakata sederhana. Pada fase ini, peserta didik menggunakan alat bantu visual dan/atau auditif untuk membantu mereka berkomunikasi secara verbal dan atau nonverbal. Teknik yang digunakan disesuaikan dengan hambatan masing-masing.</p></div></div>	<p>This is the English Course ATP or learning objectives flow and general targets for children with mental impairment or Autism Spectrum Disorder (ASD). In this form, the ministry of education and culture clearly stated about several focus on Basic English Literacy that should be taught by the institution that has special education for students with ASD.</p>
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CP & ATP

Fase A • Bahasa Inggris



nonverbal. Teknik yang digunakan disesuaikan dengan hambatan masing-masing.

Capaian per Elemen

Menyimak- Berbicara Listening- Speaking

Pada akhir fase A, peserta didik menggunakan bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti berkenalan, memberikan informasi diri, mengucapkan salam dan selamat tinggal.

By the end of Phase A students use basic English to interact in social and classroom situations such as introducing themselves, sharing personal information, greeting and bidding farewell.

Membaca- Memirsa Reading- Viewing

Belum menjadi fokus pembelajaran pada fase ini

Menulis- Mempresentasikan Writing- Presenting

Belum menjadi fokus pembelajaran pada fase ini

In Phase A which is for students who are in the first grade and seven years old, it is intended to be able to use basic English to interact in social and classroom situations such as introducing themselves, sharing personal information, greetings and bidding farewell in the first element of Speaking. Meanwhile, reading and writing are not becoming the focus of this phase.

**INFOGRAFIS ALUR TUJUAN PEMBELAJARAN
MATA PELAJARAN BAHASA INGGRIS FASE A
Pendidikan Khusus**



This is the flow of several learning focus in the phase A for special education (students with ASD).



Elemen	Capaian Pembelajaran	Tujuan Pembelajaran	Alur Tujuan Pembelajaran	Here the learning target, learning objectives and learning objectives flow are explained more detail.
	<p>Pada akhir fase A, peserta didik menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti berkenalan, memberikan informasi diri, mengucapkan salam dan selamat tinggal.</p> <p><i>By the end of Phase A, students use basic English to interact in social and classroom situations such as introducing themselves, sharing personal information, greeting and bidding farewell.</i></p>	<ul style="list-style-type: none"> Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti berkenalan Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti mengucapkan salam Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti memberikan informasi diri Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti selamat tinggal 	<p>1.1 Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti berkenalan</p> <p>1.2 Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti memberikan informasi</p> <p>1.3 Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti mengucapkan salam</p> <p>1.4 Menggunakan Bahasa Inggris sederhana untuk berinteraksi dalam situasi sosial dan kelas seperti selamat tinggal</p>	



← CP & ATP

Fase B (Usia mental \pm 8 tahun)



Bahasa Inggris

Rumusan CP

Contoh ATP

Capaian Umum

Pada Fase B, peserta didik memahami bahwa bahasa Inggris lisan dapat membantu mereka berinteraksi dengan orang lain dalam situasi sosial sehari-hari dan konteks kelas. Di dalam mengembangkan keterampilan menyimak dan berbicara, peserta didik mengikuti/merespons instruksi atau pertanyaan sederhana dalam bahasa Inggris dan membagikan informasi dengan kosakata sederhana. Pada fase ini, peserta didik menggunakan alat bantu visual dan/atau auditif untuk membantu mereka berkomunikasi secara verbal dan nonverbal. (teknik disesuaikan dengan ketunaan masing-masing). Peserta didik memahami bahwa kegiatan membaca merupakan kegiatan individu maupun berkelompok yang bisa dilakukan untuk memberikan kesenangan (reading for pleasure). Mereka memahami bahwa gambar yang terdapat dalam buku yang dibacakan oleh guru atau gambar yang peserta didik amati memiliki arti. Mereka merespons secara lisan, visual, dan/atau komunikasi nonverbal terhadap teks sederhana yang dibacakan atau gambar yang dilihatnya.

This is the English Course ATP or learning objectives flow and general targets for children with mental impairment or Autism Spectrum Disorder (ASD). In this form, the ministry of education and culture clearly stated about several focus on Basic English Literacy that should be taught by the institution that has special education for students with ASD in phase B.

← **CP & ATP**
Fase B • Bahasa Inggris

Capaian per Elemen

Menyimak- Berbicara Listening- Speaking

Pada akhir fase B, peserta didik merespon instruksi sederhana dengan gerakan tubuh atau menjawab pertanyaan pendek sederhana dengan kata, frasa atau kalimat sederhana.

By the end of Phase B, students respond to simple instructions with action-related language or answer to short, simple questions with simple words, phrases or sentences.

Membaca- Memirsa Reading- Viewing

Pada akhir fase B, peserta didik merespons secara lisan terhadap teks pendek sederhana dan familier, berbentuk teks tulis yang dibacakan oleh guru.

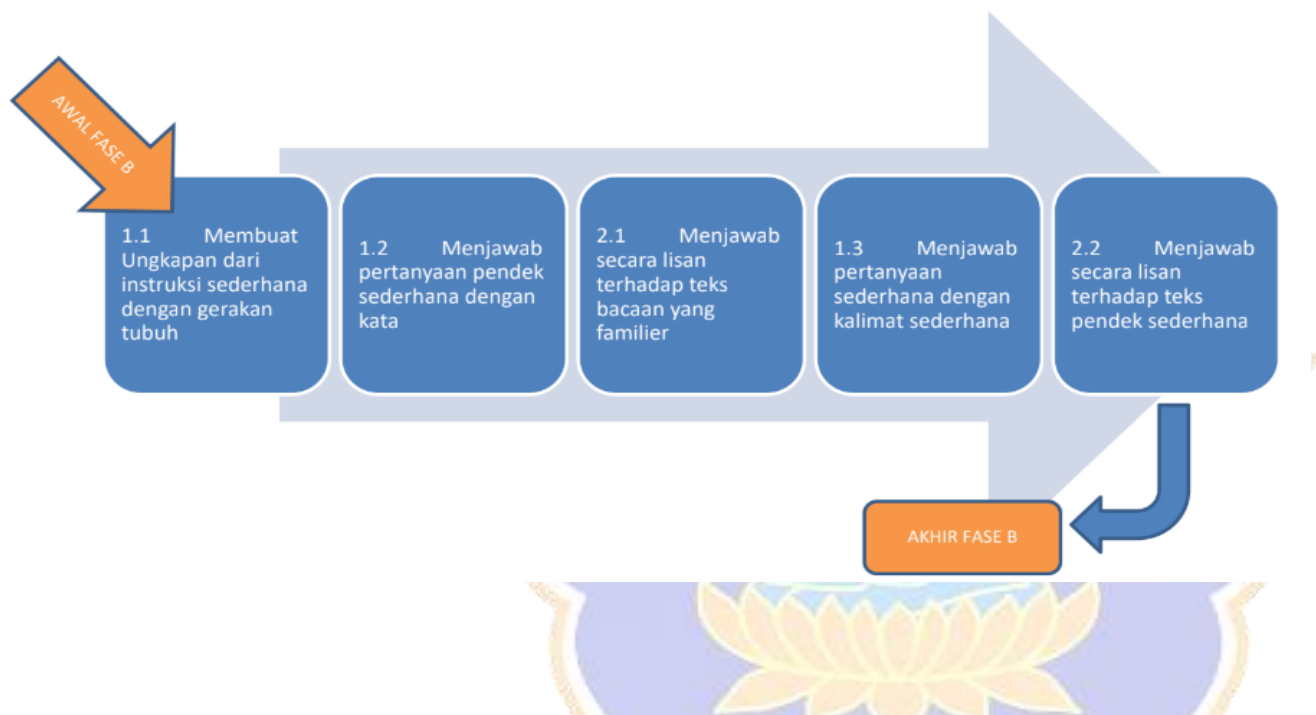
By the end of Phase B, students respond orally to short, simple, familiar texts in the form of print texts read by teachers.

Menulis- Mempresentasikan Writing- Presenting

Belum menjadi fokus pembelajaran pada fase ini.

In phase B which is for students who are in the second grade and having eight years old ages, it is destined to be able to respond to simple instructions with action-related language or answer to short, simple questions with simple words, phrases or sentences in the element of speaking. Then in the element of reading it is destined to respond orally to short, simple, familiar texts in the form of print texts read by teachers. However, writing is not becoming the focus of this phase.

**INFOGRAFIS ALUR TUJUAN PEMBELAJARAN
MATA PELAJARAN BAHASA INGGRIS FASE B
Pendidikan Khusus**



This is the flow of several learning focus in the phase B for special education (students with ASD).

**Alur Tujuan Pembelajaran
Bahasa Inggris
Pendidikan Khusus**

Here the learning target, learning objectives and learning objectives flow are explained more detail.

Fase : B

ELEMEN DAN CAPAIAN PEMBELAJARAN	TUJUAN PEMBELAJARAN	ALUR TUJUAN PEMBELAJARAN LINTAS ELEMEN
<p>1. Menyimak-Berbicara <i>Listening-Speaking</i></p> <p>Pada akhir fase B, peserta didik merespon instruksi sederhana dengan gerakan tubuh atau menjawab pertanyaan pendek sederhana dengan kata, frasa atau kalimat sederhana.</p> <p><i>By the end of Phase B, students respond to simple instructions with action-related language or answer to short, simple questions with simple words, phrases or sentences.</i></p>	<p>1.1. Membuat ungkapan dari instruksi sederhana dengan gerakan tubuh</p> <p>1.2. Menjawab pertanyaan pendek sederhana dengan kata</p> <p>1.3. Menjawab pertanyaan sederhana dengan kalimat sederhana</p>	<p>1.1 Membuat ungkapan dari instruksi sederhana dengan gerakan tubuh</p> <p>1.2 Menjawab pertanyaan pendek sederhana dengan kata</p> <p>2.1 Menjawab secara lisan terhadap teks bacaan yang familier</p> <p>1.3 Menjawab pertanyaan sederhana dengan kalimat sederhana</p> <p>2.2 Menjawab secara lisan terhadap teks pendek sederhana</p>



Appendix 2. Individual Education Programs Validation

Name	Kadek Sintya Dewi
NIM	2239041005
Topic	Digital Interactive Media Development
Title	Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)
Application	Literacy Quest
Validator	Sharifah bt Salleh (Principal and Centre Manager)
Institution	IDEAS AUTISM CENTRE

Individual Education Programs (IEPs) or Program Pendidikan Individu (PPI)

After analysing the Merdeka Curriculum special education for students with ASD, then the analysis was continued by analysing the Individual Education Programs (IEPs) used in the private elementary school of North Bali. There are several important points explained below covering; basic English literacy skills, themes, materials and activities. This information was used to designed appropriate elements of digital interactive media that can suit students with ASD's planned learning programs and academic level.

Table 1 Individual Education Programs (IEPs) or Program Pendidikan Individu (PPI)

Focused Lesson	Focused Lesson	Focused Lesson	Focused Lesson	Focused Lesson	Judge Evaluation		
					R	I	N
English Class	English Class	English Class	English Class	English Class			
Mengikuti kegiatan English berupa <i>games, dancing, and singing</i> .	Mengikuti kegiatan English berupa <i>games, dancing, and singing</i> .	Mengikuti kegiatan English berupa <i>games, dancing, and singing</i> .	Mengikuti kegiatan English berupa <i>games, dancing, and singing</i> .	Mengikuti kegiatan English berupa <i>games, dancing, and singing</i> .	√		
Tematik Diriku	Tematik Keluargaku	Tematik Hobiku	Tematik Rumahku	Tematik Kegiatanku Sehari-hari	√		
- Mendengarkan social story yang dibacakan oleh guru dengan tema diriku.	- Mendengarkan social story yang dibacakan oleh guru dengan tema keluargaku.	- Mendengarkan social story yang dibacakan oleh guru dengan tema hobiku.	- Mendengarkan social story yang dibacakan oleh guru dengan tema rumahku.	- Mendengarkan social story yang dibacakan oleh guru dengan tema kegiatanku sehari-hari.	√		
- Menyiapkan alat tulis, seperti pensil dan penghapus.	- Menyiapkan alat tulis, seperti pensil dan penghapus.	- Menyiapkan alat tulis, seperti pensil dan penghapus.	- Menyiapkan alat tulis, seperti pensil dan penghapus.	- Menyiapkan alat tulis, seperti pensil dan penghapus.	√		
- Membaca teks yang diberikan	- Membaca teks yang diberikan	- Membaca teks yang diberikan	- Membaca teks yang diberikan	- Membaca teks yang diberikan	√		
- Menjawab pertanyaan	- Menjawab pertanyaan sederhana yang tertera di soal.	- Menjawab pertanyaan	- Menjawab pertanyaan	- Menjawab pertanyaan	√		

<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman <p><u>In the classroom:</u></p> <ol style="list-style-type: none"> 1. Mampu memahami teks yang diberikan pada worksheet tentang diriku 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang diriku. 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman <p><u>In the classroom:</u></p> <ol style="list-style-type: none"> 1. Mampu memahami teks yang diberikan pada worksheet tentang keluargaku 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang keluargaku. 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman <p><u>In the classroom:</u></p> <ol style="list-style-type: none"> 1. Mampu memahami teks yang diberikan pada worksheet tentang hobiku 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang hobiku. 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman <p><u>In the classroom:</u></p> <ol style="list-style-type: none"> 1. Mampu memahami teks yang diberikan pada worksheet 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang rumahku. 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman <p><u>In the classroom:</u></p> <ol style="list-style-type: none"> 1. Mampu memahami teks yang diberikan pada worksheet 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang kegiatanku sehari-hari. 	√		
Basic English Literacy Skills	Basic English Literacy Skills	Basic English Literacy Skills	Basic English Literacy Skills	Basic English Literacy Skills			
BERKOMUNIKASI	BERKOMUNIKASI	BERKOMUNIKASI	BERKOMUNIKASI	BERKOMUNIKASI			
<ol style="list-style-type: none"> 1. Mampu menyapa teman dan guru 	<ol style="list-style-type: none"> 1. Mampu menyapa teman dan guru 	<ol style="list-style-type: none"> 1. Mampu menyapa teman dan guru 	<ol style="list-style-type: none"> 1. Mampu menyapa teman dan guru 	<ol style="list-style-type: none"> 1. Mampu menyapa teman dan guru 	√		

2. Mampu merespon pertanyaan sederhana	2. Mampu merespon pertanyaan sederhana	2. Mampu merespon pertanyaan sederhana	2. Mampu merespon pertanyaan sederhana	2. Mampu merespon pertanyaan sederhana	√		
3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	√		
MENULIS	MENULIS	MENULIS	MENULIS	MENULIS			
1. Menulis kata sebagai jawaban pada worksheet tentang diriku yang diberikan dengan baik dan tepat.	1. Menulis kata sebagai jawaban pada worksheet tentang keluargaku yang diberikan dengan baik dan tepat.	1. Menulis kata sebagai jawaban pada worksheet tentang hobiku yang diberikan dengan baik dan tepat.	1. Menulis kata sebagai jawaban pada worksheet tentang rumahku yang diberikan dengan baik dan tepat.	1. Menulis kata sebagai jawaban pada worksheet tentang kegiatanku sehari-hari yang diberikan dengan baik dan tepat.	√		
2. Melakukan kegiatan spelling kata yang berhubungan dengan tema diriku	2. Melakukan kegiatan spelling kata yang berhubungan dengan tema keluargaku	2. Melakukan kegiatan spelling kata yang berhubungan dengan tema hobiku	2. Melakukan kegiatan spelling kata yang berhubungan dengan tema rumahku	2. Melakukan kegiatan spelling kata yang berhubungan dengan tema diriku	√		
MEMBACA	MEMBACA	MEMBACA	MEMBACA	MEMBACA			
1. Membaca kata kata sederhana tentang diriku	1. Membaca kata kata sederhana tentang keluargaku	1. Membaca kata kata sederhana tentang hobiku	1. Membaca kata kata sederhana tentang rumahku	1. Membaca kata kata sederhana	√		
	2. Membaca kata dan kalimat di buku cerita		2. Membaca kata dan kalimat di buku cerita				

<p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang diriku</p> <p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang diriku</p> <p>MENDENGARKAN</p> <p>1 . Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang keluargaku</p> <p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang keluargaku</p> <p>MENDENGARKAN</p> <p>1 . Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang rumahku</p> <p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang rumahku</p> <p>MENDENGARKAN</p> <p>1 . Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang kegiatanku sehari-hari</p> <p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang kegiatanku sehari-hari</p> <p>MENDENGARKAN</p> <p>1 . Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	√	√	√		
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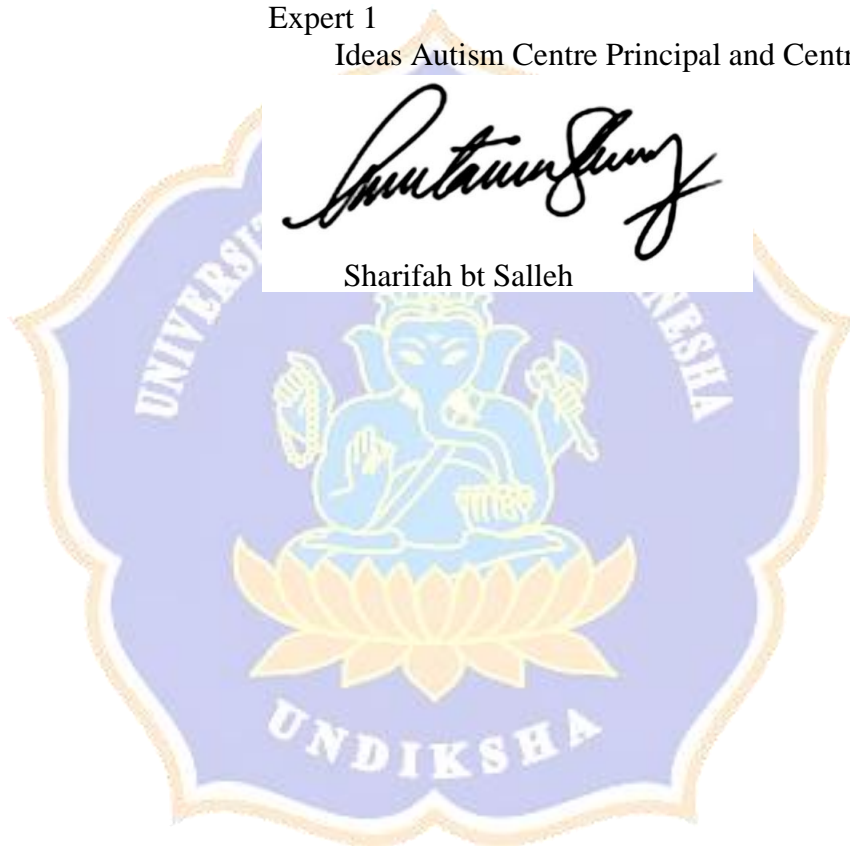
Malaysia, 16 July 2023

Expert 1

Ideas Autism Centre Principal and Centre Manager



Sharifah bt Salleh



Name Kadek Sintya Dewi

NIM 2239041005

Topic Digital Interactive Media Development

Title Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)

Application Literacy Quest

Validator Dr. Sunitha Sivakumaran (Principal and Centre Manager)

Institution Taarana School, Pusat Pendidikan Khas Sinaran

Table 1 Individual Education Programs (IEPs) or Program Pendidikan Individu (PPI)

Focused Lesson	Focused Lesson	Focused Lesson	Focused Lesson	Focused Lesson	Judge Evaluation		
					R	I	N
English Class Mengikuti kegiatan English berupa <i>games, dancing, and singing.</i>	English Class Mengikuti kegiatan English berupa <i>games, dancing, and singing.</i>	English Class Mengikuti kegiatan English berupa <i>games, dancing, and singing.</i>	English Class Mengikuti kegiatan English berupa <i>games, dancing, and singing.</i>	English Class Mengikuti kegiatan English berupa <i>games, dancing, and singing.</i>	√		

<p>Tematik Diriku</p> <ul style="list-style-type: none"> - Mendengarkan social story yang dibacakan oleh guru dengan tema diriku. - Menyiapkan alat tulis, seperti pensil dan penghapus. - Membaca teks yang diberikan - Menjawab pertanyaan sederhana yang tertera di soal. - Mengumpulkan worksheet di box "Finished". 	<p>Tematik Keluargaku</p> <ul style="list-style-type: none"> - Mendengarkan social story yang dibacakan oleh guru dengan tema keluargaku. - Menyiapkan alat tulis, seperti pensil dan penghapus. - Membaca teks yang diberikan - Menjawab pertanyaan sederhana yang tertera di soal. - Mengumpulkan worksheet di box "Finished". 	<p>Tematik Hobiku</p> <ul style="list-style-type: none"> - Mendengarkan social story yang dibacakan oleh guru dengan tema hobiku. - Menyiapkan alat tulis, seperti pensil dan penghapus. - Membaca teks yang diberikan - Menjawab pertanyaan sederhana yang tertera di soal. - Mengumpulkan worksheet di box "Finished". 	<p>Tematik Rumahku</p> <ul style="list-style-type: none"> - Mendengarkan social story yang dibacakan oleh guru dengan tema rumahku. - Menyiapkan alat tulis, seperti pensil dan penghapus. - Membaca teks yang diberikan - Menjawab pertanyaan sederhana yang tertera di soal. - Mengumpulkan worksheet di box "Finished". 	<p>Tematik Kegiatanku Sehari-hari</p> <ul style="list-style-type: none"> - Mendengarkan social story yang dibacakan oleh guru dengan tema kegiatanku sehari-hari. - Menyiapkan alat tulis, seperti pensil dan penghapus. - Membaca teks yang diberikan - Menjawab pertanyaan sederhana yang tertera di soal. - Mengumpulkan worksheet di box "Finished". 	√		
Language and Communication	Language and Communication	Language and Communication	Language and Communication	Language and Communication			

Statement of greeting in Students Language	Statement of greeting in Students Language	Statement of greeting in Students Language	Statement of greeting in Students Language	Statement of greeting in Students Language	√		
<u>In the classroom:</u>	<u>In the classroom:</u>	<u>In the classroom:</u>	<u>In the classroom:</u>	<u>In the classroom:</u>			
<ul style="list-style-type: none"> - Merespon instruksi saat melakukan absensi - Mampu memberikan respon saat ditanya kabar 	<ul style="list-style-type: none"> - Merespon instruksi saat melakukan absensi - Mampu memberikan respon saat ditanya kabar 	<ul style="list-style-type: none"> - Merespon instruksi saat melakukan absensi - Mampu memberikan respon saat ditanya kabar 	<ul style="list-style-type: none"> - Merespon instruksi saat melakukan absensi - Mampu memberikan respon saat ditanya kabar 	<ul style="list-style-type: none"> - Merespon instruksi saat melakukan absensi - Mampu memberikan respon saat ditanya kabar 	√		
<u>In the playground:</u>	<u>In the playground:</u>	<u>In the playground:</u>	<u>In the playground:</u>	<u>In the playground:</u>			
<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman 	<ul style="list-style-type: none"> - Memberikan salam kepada guru yang sedang supervisi dan kepada teman 	√		
<u>In the classroom:</u>	<u>In the classroom:</u>	<u>In the classroom:</u>	<u>In the classroom:</u>	<u>In the classroom:</u>			
1. Mampu memahami teks yang diberikan	1. Mampu memahami teks yang diberikan	1. Mampu memahami teks yang diberikan					

pada worksheet tentang diriku 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang diriku.	pada worksheet tentang keluargaku 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang keluargaku.	pada worksheet tentang hobiku 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang hobiku.	1. Mampu memahami teks yang diberikan pada worksheet 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang rumahku.	1. Mampu memahami teks yang diberikan pada worksheet 2. Mampu menjawab pertanyaan 5W + 1 H yang tertera di worksheet tentang kegiatanku sehari-hari.	√		
Basic English Literacy Skills	Basic English Literacy Skills	Basic English Literacy Skills	Basic English Literacy Skills	Basic English Literacy Skills			
BERKOMUNIKASI 1. Mampu menyapa teman dan guru 2. Mampu merespon pertanyaan sederhana 3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	BERKOMUNIKASI 1. Mampu menyapa teman dan guru 2. Mampu merespon pertanyaan sederhana 3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	BERKOMUNIKASI 1. Mampu menyapa teman dan guru 2. Mampu merespon pertanyaan sederhana 3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	BERKOMUNIKASI 1. Mampu menyapa teman dan guru 2. Mampu merespon pertanyaan sederhana 3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	BERKOMUNIKASI 1. Mampu menyapa teman dan guru 2. Mampu merespon pertanyaan sederhana 3. Mampu mengkomunikasikan apa yang dirasa/diinginkan	√	√	√
MENULIS 1. Menulis kata sebagai jawaban pada worksheet tentang	MENULIS 1. Menulis kata sebagai jawaban pada worksheet tentang	MENULIS 1. Menulis kata sebagai jawaban pada worksheet tentang	MENULIS 1. Menulis kata sebagai jawaban pada worksheet tentang	MENULIS 1. Menulis kata sebagai jawaban pada worksheet tentang	√		

<p>diriku yang diberikan dengan baik dan tepat.</p> <p>2. Melakukan kegiatan spelling kata yang berhubungan dengan tema diriku</p> <p>MEMBACA</p> <p>1. Membaca kata kata sederhana tentang diriku</p> <p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang diriku</p>	<p>keluargaku yang diberikan dengan baik dan tepat.</p> <p>2. Melakukan kegiatan spelling kata yang berhubungan dengan tema keluargaku</p> <p>MEMBACA</p> <p>1. Membaca kata kata sederhana tentang keluargaku</p> <p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang keluargaku</p>	<p>hobiku yang diberikan dengan baik dan tepat.</p> <p>2. Melakukan kegiatan spelling kata yang berhubungan dengan tema hobiku</p> <p>MEMBACA</p> <p>1. Membaca kata kata sederhana tentang hobiku</p> <p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang hobiku.</p>	<p>rumahku yang diberikan dengan baik dan tepat.</p> <p>2. Melakukan kegiatan spelling kata yang berhubungan dengan tema rumahku</p> <p>MEMBACA</p> <p>1. Membaca kata kata sederhana tentang rumahku</p> <p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang rumahku</p>	<p>kegiatanku sehari-hari yang diberikan dengan baik dan tepat.</p> <p>2. Melakukan kegiatan spelling kata yang berhubungan dengan tema diriku</p> <p>MEMBACA</p> <p>1. Membaca kata kata sederhana</p> <p>2. Membaca kata dan kalimat di buku cerita</p> <p>BERBICARA</p> <p>1.Mampu mengucapkan kata sederhana yang terdiri dari 3-4 suku kata dalam Bahasa Indonesia tentang</p>	√	√	√	
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<p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang diriku</p> <p>MENDENGARKAN</p> <p>1. Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang keluargaku</p> <p>MENDENGARKAN</p> <p>1. Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang hobiku</p> <p>MENDENGARKAN</p> <p>1. Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang rumahku</p> <p>MENDENGARKAN</p> <p>1. Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	<p>kegiatanku sehari-hari</p> <p>2. Mampu mengucapkan kata sederhana dalam Bahasa Inggris tentang kegiatanku sehari-hari</p> <p>MENDENGARKAN</p> <p>1. Mampu mendengarkan instruksi dari guru dengan baik dan melakukannya</p>	√	√	
Total						23	

Malaysia, 16 July 2023

Expert 2

Taarana Principal



Dr. Sunitha Sivakumaran

Appendix 2.1. Validity Testing of IEPs

1) Individual Education Program Validation

a. Cross Tabulation

		JUDGE I	
		Irrelevant	Relevant
JUDGE II	Irrelevant	A = 0	C = 0
	Relevant	B = 0	D = 23

b. Formula Calculation

Content Validity

$$\frac{21}{0+0+0+21} = \frac{23}{23} = 1$$

Appendix 3. Topic and Material Validation

Name	Kadek Sintya Dewi
NIM	2239041005
Topic	Digital Interactive Media Development
Title	Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)
Application	Literacy Quest
Validator	Sharifah bt Salleh (Principal and Centre Manager)
Institution	IDEAS AUTISM CENTRE

Blue Print of Materials Needed as The Source of Digital Interactive Media Development

After analysing special education curriculum for students with ASD in phase A and phase B as well as the IEPs used in the private elementary school at North Bali, the researcher designed the blue print of materials needed as the source of digital interactive media development. The following table discusses learning objectives, topics, indicators, materials and activities that were generated to develop the digital interactive media called “Literacy Quest”.

a. Theme 1 “My Body”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p>	<p>Quiz (Objective Test with pictures as the options)</p> <ul style="list-style-type: none"> • What is this? = Apakah ini? <ol style="list-style-type: none"> 1. Eyes = mata 2. Nose = hidung 3. Ears= telinga 4. Hair = rambut 5. Lips = bibir <p>I have two eyes = Saya punya dua mata I have one nose = Saya punya satu hidung I have two ears = Saya punya dua telinga I have black hair = Saya punya rambut hitam I have one lips = Saya memiliki satu bibir</p> <ul style="list-style-type: none"> • Match the picture with the word! <ol style="list-style-type: none"> 6. Eyes = a picture of eyes 7. Nose = a picture of nose 8. Ears= a picture of ears 9. Hair = a picture of 	Pictures, audios, works based Objective Test and matching pictures with correct words of Body Parts.	10	√	

			Students are able to play and finish the quiz in the digital media	10. Lips = a picture of lips				
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.	<p>“Trace the words” activity</p> <ol style="list-style-type: none"> 1. Eyes = mata 2. Nose = hidung 3. Ears= telinga 4. Hair = rambut 5. Lips = bibir 	Tracing the words	5	√	
3	Speaking English Vocabulary and simple expression of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greeting to others.	<p>What happened dear? = Ada apa sayang?</p> <ol style="list-style-type: none"> 1. My eyes hurt = Mata saya sakit 2. My nose is itchy = Hidung saya gatal 3. My ears hurt = Telinga saya sakit 4. My hair is wet = Rambut saya basah <p>“Greeting and Parting”:</p> <p>Good morning students!</p> <p>Good morning teacher!</p>	<p>Choosing on Good or Not Good Behavior.</p> <p>Practice the simple conversation.</p>	5	√	

				<div>Good morning mom!</div> <div>Good bye mom!</div> <div>Sit down please!</div> <div>Good bye and take care!</div> <div>Good bye mom!</div> <div>Good bye teacher!</div> <div>I miss you mom!</div> <div>I miss you dear!</div> <div>Crying</div> <div>Running</div> <div>Playing</div>				
Total Number Items					20	3		

b. Theme 2 “My Hobby”

No	Learning Objectives	Topics	Indicators	Material	Types of Quiz	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence	My Hobby	Students are able to read the words and simple	1. Swimming = berenang 2. Drawing = menggambar 3. Singing = menyanyi 4. Dancing = menari 5. Playing = bermain	Pictures, audios, works based Objective Test and	10	√	

	about My Hobby		<p>sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>My hobby is swimming. My hobby is drawing. My hobby is singing. My hobby is dancing. My hobby is playing.</p> <p>6. Swimming = a picture of swimming kid. 7. Drawing = a picture of drawing kid. 8. Singing = a picture of singing kid. 9. Dancing = a picture of dancing kids. 10. Playing = a picture of playing kids.</p>	matching pictures with correct words of hobbies.			
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing	<p>1. Swimming = berenang 2. Drawing = menggambar 3. Singing= bernyanyi 4. Dancing = menari 5. Playing = bermain</p>	Tracing the words	5	√	

			every word correctly.					
3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to asking and telling their hobbies.	What is your hobby? = Apakah hobimu? 1. My hobby is swimming. 2. My hobby is drawing. 3. My hobby is singing. 4. My hobby is dancing. 5. My hobby is playing.	Choosing on Good or Not Good Behavior. Practice the simple conversation.	5	√	
Total Number Items						20	3	

c. Theme 3 “My Family”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Family	My Family	Students are able to read the words and simple sentences in the quiz	Quiz (Objective Test with pictures as the options) Who is this? 1. Mother = ibu 2. Father = ayah 3. Sister = saudara perempuan 4. Brother = saudara laki-laki	Pictures, audios, works based Objective Test and matching pictures with correct words	10	√	

			<p>with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>5. Grandfather = kakek</p> <p>Who is this?</p> <p>She is my mother. + Dia adalah ibuku.</p> <p>He is my mother. = Dia adalah ayahku.</p> <p>She is my sister. = Dia adalah saudariku.</p> <p>He is my brother. = Dia adalah saudaraku.</p> <p>He is my Grandfather. = Dia adalah kakekku.</p> <p>Match the pictures with the correct words!</p> <ol style="list-style-type: none"> 1. Mother = a picture of a woman 2. Father = a picture of a man 3. Sister = a picture of a girl 4. Brother = a picture of a boy 5. Grandfather = a picture of old man 	of Family Members.			
2	Writing English Vocabulary	My Family	Students are able to do the	<p>Trace the words!</p> <ol style="list-style-type: none"> 1. Mother = ibu 	Tracing the words	5	√	

	about My Family		digital exercise by tracing every word correctly.	2. Father = ayah 3. Sister = saudara perempuan 4. Brother = saudara laki-laki 5. Grandfather = kakek				
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.	1. A: Look! She is my mother. = Lihat! Dia ibuku? B: Hai Anty! = Hai bibi. 2. A: Look! He is my father. = Lihat! Dia ayahku. B : Good morning, uncle! = Selamat pagi paman. 3. A: Look! She is my sister. = Lihat! Dia saudariku. B: Hello sister! = Halo kakak! 4. A: Look! He is my brother. = Lihat! Dia saudaraku. B: Good Afternoon brother! = Selamat siang adik! 5. A: Look! He is my grandfather. = Lihat! Dia kakekku. B: Good evening grandpa! = Selamat sore kakek!	Choosing on Good or Not Good Behavior. Practice the simple conversation.	5	√	
				Total Number Items		20	3	

d. Theme 4 “My Daily Activities”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the</p>	<p>Quiz (Objective Test with pictures as the options)</p> <p>What do you do everyday?</p> <ol style="list-style-type: none"> 1. Brush my teeth = menyikat gigi 2. Breakfast = sarapan 3. Take a bath = mandi 4. Go to school = pergi ke sekolah 5. Play games = bermain <p>What do you do everyday?</p> <ul style="list-style-type: none"> ● I brush my teeth everyday. = Saya menyikat gigi setiap hari. ● I have breakfast everyday. = Saya sarapan setiap hari. ● I take a bath everyday. = Saya mandi setiap hari. ● I go to school everyday. = Saya pergi ke sekolah setiap hari. ● I play games with my friend everyday. = Saya 	Pictures, audios, works based Objective Test and matching pictures with correct words of Daily Activities	10	√	

			quiz in the digital media	<p>bermain dengan teman setiap hari.</p> <p>6. Brush my teeth = a picture of a boy who is brushing his teeth</p> <p>7. Breakfast = a picture of a boy and a girl who are having breakfast together</p> <p>8. Take a bath = a picture of a girl who is taking a bath</p> <p>9. Go to school = a picture of a boy and a girl who are going to school together</p> <p>10. Play games = a picture of a boy and a girl who are playing together</p>				
2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.	<p>“Trace the words!”</p> <p>6. Brush my teeth = menyikat gigi</p> <p>7. Breakfast = sarapan</p> <p>8. Take a bath = mandi</p> <p>9. Go to school = pergi ke sekolah</p> <p>10. Play games = bermain</p>	Tracing the words	5	√	

3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.	<p>What do you do every day? = Apa yang kamu lakukan setiap hari?</p> <p>1. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I have breakfast every morning. = Saya sarapan setiap pagi.</p> <p>2. A: What do you do every day? = Apa yang kamu lakukan setiap hari? B: I take a bath everyday. = Saya mandi setiap hari.</p> <p>3. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I go to school every morning. = Saya pergi kesekolah setiap pagi.</p> <p>4. A: What do you do everyday? Apa yang kamu lakukan setiap hari? B: I play games with my friend everyday. = Saya bermain dengan teman setiap hari.</p> <p>5. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi?</p>	<p>Choosing on Good or Not Good Behavior.</p> <p>Practice the simple conversation.</p>	5	√	
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				B: I brush my teeth everyday. = Saya menyikat gigi setiap hari.				
				Total Number Items		20	3	

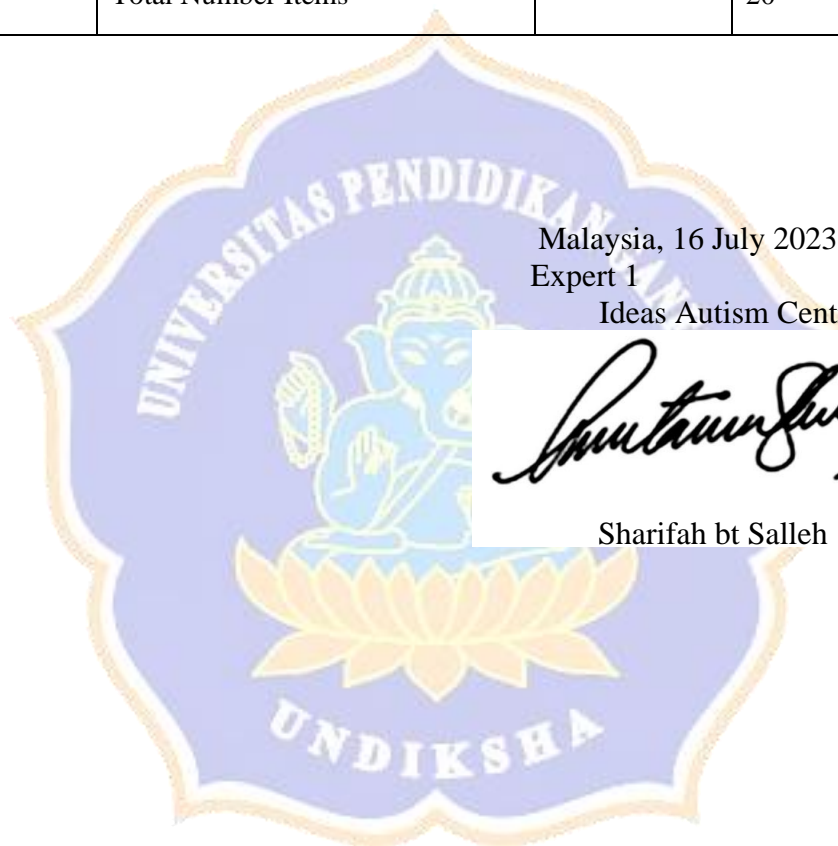
e. Theme 5 “My House”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My House	My House	Students are able to read the words and simple sentences in the quiz with audio assistance. Students are able to match the words and the correct picture	<p>Quiz (Objective Test with pictures as the options)</p> <p>What is this?</p> <ol style="list-style-type: none"> 1. Car Garage = Garasi Mobil 2. Dining room = ruang makan 3. Balcony = balcon 4. Garden = kebun 5. Laundry room = ruang cuci <p>This is a car garage. = Ini adalah sebuah garasi mobil.</p>	Pictures, audios, works based Objective Test and matching pictures with correct words of My Daily Activities	10	√	

			<p>without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>This is a dining room. = Ini adalah sebuah ruang makan.</p> <p>This is a balcony. = Ini adalah sebuah balcon.</p> <p>This is a garden. = Ini adalah sebuah kebun.</p> <p>This is a laundry room. = Ini adalah sebuah kamar cuci</p> <ol style="list-style-type: none"> 1. Car Garage = a picture of a car garage 2. Dining room = a picture of a dining room 3. Balcony = a picture of a balcony 4. Garden = a picture of a garden 5. Laundry room = a picture of a laundry room 				
2	Writing English Vocabulary about My House	My House	<p>Students are able to do the digital exercise by tracing every word correctly.</p>	<p>“Trace the words!”</p> <ol style="list-style-type: none"> 1. Brush my teeth = menyikat gigi 2. Breakfast = sarapan 3. Take a bath = mandi 4. Go to school = pergi ke sekolah 5. Play games = bermain 	Tracing the words	5	√	

3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.	<p>What do you do every day? = Apa yang kamu lakukan setiap hari?</p> <p>1. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I have breakfast every morning. = Saya sarapan setiap pagi.</p> <p>2. A: What do you do every day? = Apa yang kamu lakukan setiap hari? B: I take a bath everyday. = Saya mandi setiap hari.</p> <p>3. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I go to school every morning. = Saya pergi kesekolah setiap pagi.</p> <p>4. A: What do you do everyday? Apa yang kamu lakukan setiap hari? B: I play games with my friend everyday. = Saya bermain dengan teman setiap hari.</p> <p>5. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi?</p>	<p>Choosing on Good or Not Good Behavior.</p> <p>Practice the simple conversation.</p>	5	√	

				B: I brush my teeth everyday. = Saya menyikat gigi setiap hari.				
				Total Number Items		20	3	



Malaysia, 16 July 2023

Expert 1

Ideas Autism Centre Principal and Centre Manager

Sharifah bt Salleh

Name Kadek Sintya Dewi

NIM 2239041005

Topic Digital Interactive Media Development

Title Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)

Application Literacy Quest

Validator Dr. Sunitha Sivakumaran (Principal and Centre Manager)

Institution Taarana School, Pusat Pendidikan Khas Sinaran

Blue Print of Materials Needed as The Source of Digital Interactive Media Development

After analysing special education curriculum for students with ASD in phase A and phase B as well as the IEPs used in the private elementary school at North Bali and Malaysia, the researcher designed the blue print of materials needed as the source of digital interactive media development. The following table discusses learning objectives, topics, indicators, materials and activities that were generated to develop the digital interactive media called “Literacy Quest”.

a. Theme 1 “My Body”

No		Topics	Indicators	Material	Activities		Judge Evaluation
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	Learning Objectives					Numbers of Questions	Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the</p>	<p>Quiz (Objective Test with pictures as the options)</p> <ul style="list-style-type: none"> • What is this? = Apakah ini? <p>11. Eyes = mata 12. Nose = hidung 13. Ears= telinga 14. Hair = rambut 15. Lips = bibir</p> <p>I have two eyes = Saya punya dua mata I have one nose = Saya punya satu hidung I have two ears = Saya punya dua telinga I have black hair = Saya punya rambut hitam I have one lips = Saya memiliki satu bibir</p> <ul style="list-style-type: none"> • Match the picture with the word! <p>16. Eyes = a picture of eyes 17. Nose = a picture of nose 18. Ears= a picture of ears 19. Hair = a picture of 20. Lips = a picture of lips</p>	<p>Pictures, audios, works based Objective Test and matching pictures with correct words of Body Parts.</p>	10	√	

			digital media					
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.	<p>“Trace the words” activity</p> <ol style="list-style-type: none"> 1. Eyes = mata 2. Nose = hidung 3. Ears= telinga 4. Hair = rambut 5. Lips = bibir 	Tracing the words	5	√	
3	Speaking English Vocabulary and simple expression of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greeting to others.	<p>What happened dear? = Ada apa sayang?</p> <ol style="list-style-type: none"> 5. My eyes hurt = Mata saya sakit 6. My nose is itchy = Hidung saya gatal 7. My ears hurt = Telinga saya sakit 8. My hair is wet = Rambut saya basah <p>“Greeting and Parting”:</p> <p>Good morning students!</p> <p>Good morning teacher!</p> <p>Good morning mom!</p> <p>Good bye mom!</p> <p>Sit down please!</p>	<p>Choosing on Good or Not Good Behavior.</p> <p>Practice the simple conversation.</p>	5	√	

				Good bye and take care!				
				Good bye mom!				
				Good bye teacher!				
				I miss you mom!				
				I miss you dear!				
				Crying				
				Running				
				Playing				
Total Number Items						20	3	

b. Theme 2 “My Hobby”

No	Learning Objectives	Topics	Indicators	Material	Types of Quiz	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	Students are able to read the words and simple sentences in the quiz	1. Swimming = berenang 2. Drawing = menggambar 3. Singing = menyanyi 4. Dancing = menari 5. Playing = bermain My hobby is swimming. My hobby is drawing. My hobby is singing.	Pictures, audios, works based Objective Test and matching pictures with	10	√	

			<p>with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>My hobby is dancing. My hobby is playing.</p> <p>6. Swimming = a picture of swimming kid. 7. Drawing = a picture of drawing kid. 8. Singing = a picture of singing kid. 9. Dancing = a picture of dancing kids. 10. Playing = a picture of playing kids.</p>	correct words of hobbies.			
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing every word correctly.	<p>11. Swimming = berenang 12. Drawing = menggambar 13. Singing= bernyanyi 14. Dancing = menari 15. Playing = bermain</p>	Tracing the words	5	√	

3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to asking and telling their hobbies.	What is your hobby? = Apakah hobimu? 6. My hobby is swimming. 7. My hobby is drawing. 8. My hobby is singing. 9. My hobby is dancing. 10. My hobby is playing.	Choosing on Good or Not Good Behavior. Practice the simple conversation.	5	√	
Total Number Items						20	3	

c. Theme 3 “My Family”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Family	My Family	Students are able to read the words and simple sentences in the quiz with audio assistance.	Quiz (Objective Test with pictures as the options) Who is this? 1. Mother = ibu 2. Father = ayah 3. Sister = saudara perempuan 4. Brother = saudara laki-laki 5. Grandfather = kakek	Pictures, audios, works based Objective Test and matching pictures with correct words	10	√	

			<p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>Who is this?</p> <p>She is my mother. + Dia adalah ibuku.</p> <p>He is my mother. = Dia adalah ayahku.</p> <p>She is my sister. = Dia adalah saudariku.</p> <p>He is my brother. = Dia adalah saudaraku.</p> <p>He is my Grandfather. = Dia adalah kakekku.</p> <p>Match the pictures with the correct words!</p> <p>11. Mother = a picture of a woman</p> <p>12. Father = a picture of a man</p> <p>13. Sister = a picture of a girl</p> <p>14. Brother = a picture of a boy</p> <p>15. Grandfather = a picture of old man</p>	of Family Members.			
2	Writing English Vocabulary	My Family	Students are able to do the digital	<p>Trace the words!</p> <p>1. Mother = ibu</p> <p>2. Father = ayah</p> <p>3. Sister = saudara perempuan</p>	Tracing the words	5	√	

	about My Family		exercise by tracing every word correctly.	4. Brother = saudara laki-laki 5. Grandfather = kakek				
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.	1. A: Look! She is my mother. = Lihat! Dia ibuku? B: Hai Anty! = Hai bibi. 2. A: Look! He is my father. = Lihat! Dia ayahku. B : Good morning, uncle! = Selamat pagi paman. 3. A: Look! She is my sister. = Lihat! Dia saudariku. B: Hello sister! = Halo kakak! 4. A: Look! He is my brother. = Lihat! Dia saudaraku. B: Good Afternoon brother! = Selamat siang adik! 5. A: Look! He is my grandfather. = Lihat! Dia kakekku. B: Good evening grandpa! = Selamat sore kakek!	Choosing on Good or Not Good Behavior. Practice the simple conversation.	5	√	
				Total Number Items		20	3	

d. Theme 4 “My Daily Activities”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the</p>	<p>Quiz (Objective Test with pictures as the options)</p> <p>What do you do everyday?</p> <ol style="list-style-type: none"> 1. Brush my teeth = menyikat gigi 2. Breakfast = sarapan 3. Take a bath = mandi 4. Go to school = pergi ke sekolah 5. Play games = bermain <p>What do you do everyday?</p> <ul style="list-style-type: none"> ● I brush my teeth everyday. = Saya menyikat gigi setiap hari. ● I have breakfast everyday. = Saya sarapan setiap hari. ● I take a bath everyday. = Saya mandi setiap hari. ● I go to school everyday. = Saya pergi ke sekolah setiap hari. ● I play games with my friend everyday. = Saya 	<p>Pictures, audios, works based Objective Test and matching pictures with correct words of Daily Activities</p>	10	√	

			digital media	<p>bermain dengan teman setiap hari.</p> <ol style="list-style-type: none"> 1. Brush my teeth = a picture of a boy who is brushing his teeth 2. Breakfast = a picture of a boy and a girl who are having breakfast together 3. Take a bath = a picture of a girl who is taking a bath 4. Go to school = a picture of a boy and a girl who are going to school together 5. Play games = a picture of a boy and a girl who are playing together 				
2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.	<p>“Trace the words!”</p> <ol style="list-style-type: none"> 1. Brush my teeth = menyikat gigi 2. Breakfast = sarapan 3. Take a bath = mandi 4. Go to school = pergi ke sekolah 5. Play games = bermain 	Tracing the words	5	√	

3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.	<p>What do you do every day? = Apa yang kamu lakukan setiap hari?</p> <p>1. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I have breakfast every morning. = Saya sarapan setiap pagi.</p> <p>2. A: What do you do every day? = Apa yang kamu lakukan setiap hari? B: I take a bath everyday. = Saya mandi setiap hari.</p> <p>3. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I go to school every morning. = Saya pergi kesekolah setiap pagi.</p> <p>4. A: What do you do everyday? Apa yang kamu lakukan setiap hari? B: I play games with my friend everyday. = Saya bermain dengan teman setiap hari.</p> <p>5. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi?</p>	<p>Choosing on Good or Not Good Behavior.</p> <p>Practice the simple conversation.</p>	5	√	

				B: I brush my teeth everyday. = Saya menyikat gigi setiap hari.				
				Total Number Items		20	3	

e. Theme 5 “My House”

No	Learning Objectives	Topics	Indicators	Material	Activities	Numbers of Questions	Judge Evaluation	
							Relevant	Irrelevant
1	Reading English Vocabulary and simple sentence about My House	My House	Students are able to read the words and simple sentences in the quiz with audio assistance. Students are able to match the words and the correct picture without	Quiz (Objective Test with pictures as the options) What is this? 1. Car Garage = Garasi Mobil 2. Dining room = ruang makan 3. Balcony = balcon 4. Garden = kebun 5. Laundry room = ruang cuci This is a car garage. = Ini adalah sebuah garasi mobil. This is a dining room. = Ini adalah sebuah ruang makan.	Pictures, audios, works based Objective Test and matching pictures with correct words of My Daily Activities	10	√	

			<p>audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>This is a balcony. = Ini adalah sebuah balcon.</p> <p>This is a garden. = Ini adalah sebuah kebun.</p> <p>This is a laundry room. = Ini adalah sebuah kamar cuci</p> <p>6. Car Garage = a picture of a car garage</p> <p>7. Dining room = a picture of a dining room</p> <p>8. Balcony = a picture of a balcony</p> <p>9. Garden = a picture of a garden</p> <p>10. Laundry room = a picture of a laundry room</p>				
2	Writing English Vocabulary about My House	My House	<p>Students are able to do the digital exercise by tracing every word correctly.</p>	<p>“Trace the words!”</p> <p>6. Brush my teeth = menyikat gigi</p> <p>7. Breakfast = sarapan</p> <p>8. Take a bath = mandi</p> <p>9. Go to school = pergi ke sekolah</p> <p>10. Play games = bermain</p>	Tracing the words	5	√	

3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.	<p>What do you do every day? = Apa yang kamu lakukan setiap hari?</p> <p>6. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I have breakfast every morning. = Saya sarapan setiap pagi.</p> <p>7. A: What do you do every day? = Apa yang kamu lakukan setiap hari? B: I take a bath everyday. = Saya mandi setiap hari.</p> <p>8. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi? B: I go to school every morning. = Saya pergi kesekolah setiap pagi.</p> <p>9. A: What do you do everyday? Apa yang kamu lakukan setiap hari? B: I play games with my friend everyday. = Saya bermain dengan teman setiap hari.</p> <p>10. A: What do you do every morning? = Apa yang kamu lakukan setiap pagi?</p>	<p>Choosing on Good or Not Good Behavior.</p> <p>Practice the simple conversation.</p>	5	√	
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				B: I brush my teeth everyday. = Saya menyikat gigi setiap hari.				
				Total Number Items		20	3	



Malaysia, 16 July 2023
Expert 2
Taarana Principal

Dr. Sunitha Sivakumaran

Appendix 2.2. Content Validity Testing

1) Validation of Topics and Material Inserted to Develop Digital Interactive Media “Literacy Quest”

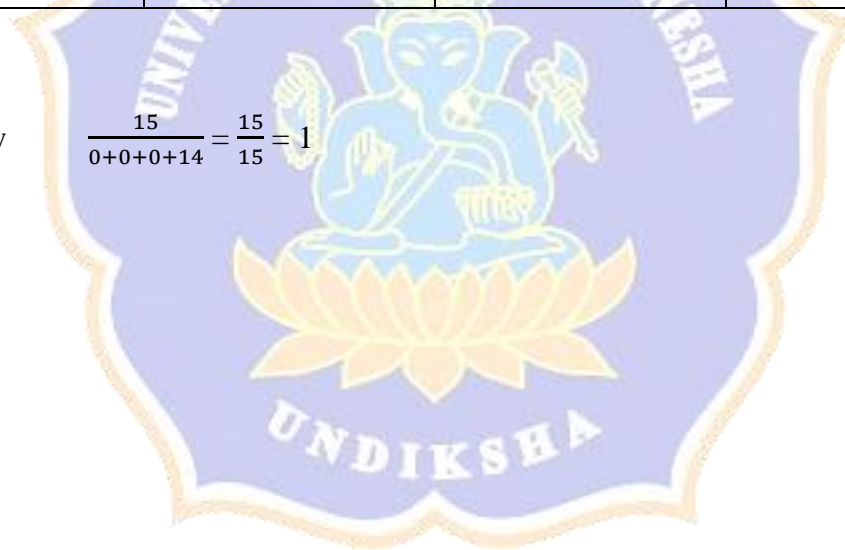
a. Cross Tabulation

		JUDGE I	
		Irrelevant	Relevant
JUDGE II	Irrelevant	A = 0	C = 0
	Relevant	B = 0	D = 15

b. Formula Calculation

Content Validity

$$\frac{15}{0+0+0+15} = \frac{15}{15} = 1$$



Appendix 4. Observation Result of Intervention Phase in Indonesia and Malaysia

No.	Participants Identity	Teaching and Learning Activity	Notes
1.	<p>Name: IS1CA</p> <p>Age: 8 y.o</p> <p>Gender: Male</p> <p>Academic Level: Academic 1</p> <p>Intermediate level (picture-words)</p> <p>Diagnoses: Autism ADHD</p> <p>Characteristics: Lack of focus, over cheerful, reward addicted, playful, cheerful, discipline and very active.</p>	<p>Pre-Activity</p> <ul style="list-style-type: none"> Greeting: the teacher greets the student expressively Recap: The teacher explains about the topic “Parts of Body”. Asking some questions about the topic. Asking students to touch five parts of body. Then, Watching a Video in the Literacy Quest App. <p>Following Up Activities</p> <p>Whilst Activity</p> <ul style="list-style-type: none"> Introduction: The teacher introduces further five parts of body by using Quiz activity in Literacy Quest Application Activities: Answering a quiz about five parts of body. 	<p>Media Used: Literacy Quest “Recap Video of Body Parts”</p> <p>Focused Skills: focus and interaction skills.</p> <p>Media Used: Literacy Quest “Quiz”</p> <p>Focused Skills: writing, reading, social communication.</p>

	<p>Favourite Activities: Drawing, Playing Games</p>	<ul style="list-style-type: none"> ● Listening to correct pronunciation of those five parts of body. ● Reading five simple sentences about those five parts of body. ● Matching Pictures with the correct words. ● Tracing words about previous five parts of body. ● Responding to correct expression to answer questions about those previous learned parts of body conditions. ● Practicing the simple talk with the teacher about asking and giving information about body condition. <p>Following Up Activity</p>	
		<p>Post Activity</p> <ul style="list-style-type: none"> ● Games: Arranging Jumbled Puzzle ● Rewards: Sing a song about parts of Body <p>Following Up Activity</p>	<p>Media Used: Printed Puzzle</p> <p>Focused Skills: vocabulary building, speaking (singing), focus skill on teachers' instructions while doing the puzzle and imitating the correct pronunciation in singing a song.</p>

	<p>Result □</p> <ul style="list-style-type: none"> ● IS1CA at the beginning seems not knowing 5 English words about parts of body that were asked by the teacher. He looked very doubtful during pre-activity. ● Entering the whilst activity, IS1CA was introduced to an application namely “Literacy Quest” to continue the activity that was being done in a digital quiz. He looked so excited about the quiz and he looked confuse at the beginning. Until he knew how to use the app properly, then he suddenly can answer the quiz very quickly because he can listen to audios provided in the app when he was failed to read. His memory was back and he can remember those five words by listening to its audio. ● He looks so cheerful when listening to direct feedback audio and at the end of the game he can get three stars. ● To check his memory further, the next activity was matching pictures of body parts with the words without any audio. Here he faced a quite same problem again. At the beginning he forgets the spelling of body part name in the form of words. But after the teacher asked him to be more focus, then he 	
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		<p>can match the pictures with the appropriate words with teacher guidance.</p> <ul style="list-style-type: none">● This activity was repeated once again till he can do it independently.● The next activity was tracing words about body parts. This activity seems so easy for him since there had been the words' shadow. He can finish it well although with a lot of erasing, undoing and clearing unwanted lines.● Then, strategically the teacher took a piece of blank paper and asked him to write five words that had been learned just now. Surprisingly, he wrote two words as the title "America" and "Indonesia". After that he divided the paper to be 2 parts. He wrote the words in Bahasa Indonesia first and then followed by the English words or the translation. This writing activity still under the teacher guidance since he had lack of confidence in writing.● Finally, the teacher closed the lesson by leading him to play a printed puzzle stocked on the wall. The jumbled puzzle about those five body parts should be	
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		<p>well arrange with the instruction in English Language from the teacher.</p> <ul style="list-style-type: none"> ● He can do it very well and very quickly. ● That's why the teacher gave him additional activity about sing a song of body parts. The teacher changed the lyric of "head, shoulders, knees and toes song" became "hair, eyes, nose and lips". ● He really enjoyed the teaching and learning process with the tablet and literacy quest application. He asked the teacher to play with the tablet again the next day. ● After treatment: she can be calm down, and do the activities very well. She gave her teacher a gift "a potato snack because of she is happy to learn with the apps". 	
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2.	<p>Name: IS2SN</p> <p>Age: 10th</p> <p>Gender: Male</p> <p>Academic Level: 5th level of academic special Programme (Advance: Picture-Sentence)</p> <p>Diagnosis: Autism</p> <p>Characteristics: Lack of focus but getting better gradually, can read sentences, lack of social interaction</p> <p>Favourite Activities:</p> <ul style="list-style-type: none"> • Drawing: Lift (at the moment so obsessed about lift) • Non-digital playing: Lego (making the shape of Lift) 	<p>Pre-Activity</p> <ul style="list-style-type: none"> • Greeting: the teacher greets the student expressively • Recap: The teacher explains about the topic “Parts of Body”. Asking some questions about the topic. Asking students to touch five parts of body. Then, Watching a Video in the Literacy App. <p>Following Up Activities</p> <p>Whilst Activity</p> <ul style="list-style-type: none"> • Introduction: The teacher introduces further five parts of body by using Quiz activity in Literacy Quest Application • Activities: Answering a quiz about five parts of body. • Listening to correct pronunciation of those five parts of body. • Reading five simple sentences about those five parts of body. • Matching Pictures with the correct words. • Tracing words about previous five parts of body. 	<p>Media Used: Literacy Quest “Recap Video of Body Parts”</p> <p>Focused Skills: focus skills, interaction skill.</p> <p>Media Used: Literacy Quest “Quiz”</p> <p>Focused Skills: writing, reading, social communication.</p>
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	<ul style="list-style-type: none"> Digital game playing: Roblox games (at home) 	<ul style="list-style-type: none"> Responding to correct expression to answer questions about those previous learned parts of body conditions. Practicing the simple talk with the teacher about asking and giving information about body condition. <p>Following Up Activity</p>	
		<p>Post Activity</p> <ul style="list-style-type: none"> Games: Arranging Jumbled Puzzle Rewards: Sing a song about parts of Body <p>Following Up Activity</p> <p>Drawing a person and naming its body parts.</p>	<p>Media Used: Printed Puzzle</p> <p>Focused Skills: vocabulary building, speaking (singing), focus skill on teachers' instructions while doing the puzzle and imitating the correct pronunciation in singing a song.</p>
	Result □	<ul style="list-style-type: none"> IS2SN feels so excited about the apps. He smiles and looks so happy when the teacher explain that he will learn with tablet and do some activities inside the apps. Quite same with IS1CA, IS2SN also over excited to gadget. The teacher taught IS2SN easily because he can answer the questions in “Quiz 	

		<p>activity” without listening more to the audio. He is older than IS1CA and spending more years in the school compared to IS1CA. Therefore, he has been trained longer and had better focus and more controlled behaviour than IS1CA. He enjoyed drawing a lot. Then, after he can finish the activity with Literacy Quest application very well, the teacher gave him free time to draw a person and name its body parts.</p> <ul style="list-style-type: none"> ● Baseline: good vocabulary mastery, good focus, excited to gadget, good motoric control, usually speak out of topic and try to explore the gadget out of the Literacy Quest application like try to open YouTube and other online games. ● After treatment: start to do digital quiz very well with minimal stimulation, can memories the vocabularies very well, calm down in front of the gadget. 	
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3.	<p>Name: IS3DVN</p> <p>Age: 10 years old</p> <p>Gender: Male</p> <p>Academic Level: 5th level of academic special Programme (Advance: Picture-Sentence)</p> <p>Diagnosis: Autism</p> <p>Characteristics: easily melting down, hearing sensitivity, lack of focus.</p> <p>Can read sentences, can count, speaking English fluently.</p> <p>Favourite Activities: watching YouTube, and playing golf with non-digital toys.</p>	<p>Pre-Activity</p> <ul style="list-style-type: none"> ● Greeting: the teacher greets the student expressively ● Recap: The teacher explains about the topic “Parts of Body”. Asking some questions about the topic. Asking students to touch five parts of body. Then, Watching a Video in the Literacy App. ● Following Up Activities <p>Whilst Activity</p> <ul style="list-style-type: none"> ● Introduction: The teacher introduces further five parts of body by using Quiz activity in Literacy Quest Application ● Activities: Answering a quiz about five parts of body. ● Listening to correct pronunciation of those five parts of body. ● Reading five simple sentences about those five parts of body. ● Matching Pictures with the correct words. ● Tracing words about previous five parts of body. 	<p>Media Used: Literacy Quest “Recap Video of Body Parts”</p> <p>Focused Skills: focus skills, interaction skill.</p> <p>Media Used: Literacy Quest “Quiz”</p> <p>Focused Skills: writing, reading, social communication.</p>
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		<ul style="list-style-type: none"> ● Responding to correct expression to answer questions about those previous learned parts of body conditions. ● Practicing the simple talk with the teacher about asking and giving information about body condition. <p>Following Up Activity</p>	
		<p>Post Activity</p> <ul style="list-style-type: none"> ● Games: Arranging Jumbled Puzzle ● Rewards: Sing a song about parts of Body <p>Following Up Activity</p> <p>Working on printed worksheet related to the topic.</p>	<p>Media Used: Printed Puzzle</p> <p>Focused Skills: vocabulary building, speaking (singing), focus skill on teachers' instructions while doing the puzzle and imitating the correct pronunciation in singing a song.</p>
	Result □	<ul style="list-style-type: none"> ● IS3DVN feels so excited about the apps. He smiles and looks so happy when the teacher explain that he will learn with tablet and do some activities inside the apps. Quite same with IS2SN who felt excited to gadget, but IS3DVN was over excited to gadget. The teacher taught IS3DVN a little bit harder than IS2SN 	

		<p>although he can answer the questions easily in “Quiz activity” without listening more to the audio. He was at the same age with IS2SN and spending more years in the school compared to IS2SN. Therefore, he has been trained longer but he had sensory sensitivities to sound and can lose focus easily. Therefore, sometimes the shadow teacher had to cope those problems during the teaching and learning process. He has hard time to maintain his focus and control his behaviour compared to IS2SN. He enjoyed playing gadget a lot. Then, after he can finish the activity with Literacy Quest application very well, the teacher gave him free time to watch vocabulary video in YouTube.</p> <ul style="list-style-type: none"> ● Baseline: good vocabulary mastery, good focus but easily lose it, excited to gadget, good motoric control, usually speak out of topic and try to explore the gadget out of the Literacy Quest application like try to open YouTube and other online games. ● After treatment: start to do digital quiz very well with minimal stimulation, can memories the vocabularies very well, calm down in front of the gadget. 	
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	<p>Important Notes</p>	<p>Reward Alert</p> <p>Steps in Teaching and Learning Process di Indonesia: Greet-recap-intro-activities-games-rewards.</p>	<p>Rewards was given regularly after students showed good performance and behaviour.</p> <p>Rewards was also given at the end of a lesson whenever students behave well from the first lesson until the last lesson. It was done based on some consideration of the students' characteristics and situational conditions. For example: when a student behaved well in every lesson and activity but he still had focus problem, then the reward given may in the form of playing with non-screen activities.</p>
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A. The result of “Literacy Quest” implementation in the teaching and learning process as digital interactive media for teaching basic English literacy and communication to young learners with ASD in Malaysia.

The following table shows the observation result during the implementation of Literacy Quest to three samples in Malaysia. This table consists only the implementation of the first topic “My Body” in the first week intervention to Malaysian young learners with ASD.

Observation data of teaching and learning activities using Literacy Quest in Malaysia			
No.	Participants Identity	Teaching and Learning Activities	Notes
1.	Name: MS1JVT Age: 8 years old Gender: Female (an orphan girl) Academic Level: Academic 1 Begginer) Beginner level (pre K of reading, 1 st grade Diagnoses: Intellectual Disability, ADHD Characteristics: Lack of focus, sometimes has good focus, attention seeker. Favourite Activities: All can be done	Pre-Activity <ul style="list-style-type: none"> Greeting: the teacher greets the student expressively Recap: The teacher explains about the topic “Parts of Body”. Asking some questions about the topic. Asking students to touch five parts of body. Then, Watching a Video in the Literacy App. 	Media Used: Literacy Quest “Recap Video of Body Parts” Focused Skills: focus skills, interaction skill.
		Following Up Activities Whilst Activity <ul style="list-style-type: none"> Introduction: The teacher introduces further five parts of body by using Quiz activity in Literacy Quest Application Activities: Answering a quiz about five parts of body. Listening to correct pronunciation of those five parts of body. Reading five simple sentences about those five parts of body. Matching Pictures with the correct words. 	Media Used: Literacy Quest “Quiz” Focused Skills: writing, reading, social communication.

		<ul style="list-style-type: none"> ● Tracing words about previous five parts of body. ● Responding to correct expression to answer questions about those previous learned parts of body conditions. ● Practicing the simple talk with the teacher about asking and giving information about body condition. <p>Following Up Activity</p>	
		<p>Post Activity</p> <ul style="list-style-type: none"> ● Games: Arranging Jumbled Puzzle ● Rewards: Sing a song about parts of Body <p>Following Up Activity</p>	<p>Media Used: Printed Puzzle</p> <p>Focused Skills: vocabulary building, speaking (singing), focus skill on teachers' instructions while doing the puzzle and imitating the correct pronunciation in singing a song.</p>
	Result	<ul style="list-style-type: none"> ● The teaching and learning process started with greeting from a teacher to make class situation warmer. ● Then, teacher gave recap about the topic and some learning materials and media that will be used in that English lesson period. The teacher told that in English lesson today there will be an introduction about Body Parts and learning how ask and 	<p>NB: combining reading, writing, and simple speaking activities assisted by digital interactive media specifically designed to meet the characteristics of students with ASD can develop student's basic literacy and communication skills well. It</p>

		<p>tell body condition in a very simple talk to practice social interaction.</p> <ul style="list-style-type: none"> ● The focus of lesson was: to build students English vocabulary about body parts, to teach the students how to read the words and simple sentences, match the body parts pictures with the correct words, write words about parts of body, and to train students basic communication skill by answering and practicing about asking and telling about body condition. ● During the recap activity, the teacher also asked her to touch some parts of her body based on the teacher's instruction. She confused and looked doubtful at the beginning. Then, the teacher repeated the same activities two times more as a warming up activity. ● After recap activity, teacher continue with introducing five body parts to the student by playing a video in the Literacy Quest App to her better pictures about the five body parts. Pictures, audio, music, words/five vocabularies and limited duration video really fitted the characteristics of students with ASD. ● The focus of the lesson was only five parts of body. Why only five vocabularies? Because, for students with autism they have limited comprehension that teacher needs to consider to limit vocabularies amount per teaching. 	<p>can be seen from the activities and the result of activities explained in the teaching and learning activities columns.</p>
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		<ul style="list-style-type: none"> ● She enjoyed watching the short video with a lot of smiles at her face. She was given to watch the video two times and after that the teacher review a little bit by asking her again to touch five body parts mentioned in the video. ● She could do it very well, although still doubtfully. ● The activity then continued by answering some questions in the quiz feature of Literacy Quest App. This app is completed by pictures, words, audios, simple sentences and reward. It was designed to meet the characteristics of students with ASD. She was really excited to do the quiz after the teacher told her about how to use several buttons in the quiz and got ready to do the quiz. While doing the quiz the teacher gave her some instructions like: “hold on, read the words first! If you cannot read the word please tap the blue button to listen to the audio!” ● This app as a learning media will work better whenever there are more meaningful instructions from teachers which are fit to the students’ weaknesses and conditions. Thus, the media can help teachers to overcome it easier. ● Next, the activity was followed by matching pictures with words. In this activity, the app was used but there was no audio provided to check whether the student can memories the words 	
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		<p>or vocabularies that had been learned in the previous activities or not.</p> <ul style="list-style-type: none">● Because this activity in the app had been design to make students with ASD can have better focus to only provide minimum pictures and words in each page, that's why the students can perform better here.● Next activity was tracing words about five related body parts that has been learned previously. The student was required to trace the words' shadow. This activity was really easy to do. Therefore, the teacher asked her to take a piece of blank paper in the small cupboard in the classroom and give her dictation about those five vocabularies of body parts.● Slowly she could remember those five words and were able to write the on the paper.● Furthermore, the last activity was about simple talk on asking and telling body condition.● The app provides five simple talk related to the condition of five body parts that had been leaner previously. In this activity, the students have to pay attention on the vocabularies, clues in the pictures, and audios about what the speakers in the simple talk said. Besides, students also have to choose whether a situation	
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		<p>in which a child can answer a question from someone properly is a good or not good behaviour.</p> <ul style="list-style-type: none"> • The teacher asked her to read and listen to the simple talk first and let her to answer whether the child in the picture showing a good or not good behaviour first. Then, after all questions had been answered the teacher continued to do a practice with the student. The teacher asked her about her condition by saying: Teacher: “what happened to you JVT?” (for example: your eyes in not in a good condition) MS1JVT: My eyes hurt! • By having reading, listening, writing and speaking activity at the same time in a language learning lesson, it is believed to give better experience that the vocabularies or a concept can stick better on the brain. • After speaking activity, the lesson was closed by playing a puzzle about five body parts introduced previously and sing a song about body parts. • In short, MS1JVT likes to learn with the apps, although at the beginning she was losing her focus a little bit because of having over interest to gadget. After being treated carefully with guidance 1 times, she then can-do activities in the apps independently with teacher controls. 	
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		<ul style="list-style-type: none"> ● Baseline: mispronouncing “eye, and eyes, wet” + over interested to gadget ● After treatment: she can be calm down, and do the activities very well. She gave her teacher a gift “a potato snack because of she is happy to learn with the apps”. 	
2.	<p>Name: MS2SML</p> <p>Age: 7 years old</p> <p>Gender: Male</p> <p>Academic Level: Early Transition Programme</p> <p>Diagnoses: Autism</p> <p>Characteristics: Lack of Focus, Learning/starting to talk.</p> <p>Favourite Activities: Take and drop, working on tablet activities, don’t like worksheet.</p>	<p>Pre-Activity</p> <ul style="list-style-type: none"> ● Greeting: the teacher greets the student expressively ● Recap: The teacher explains about the topic “Parts of Body”. Asking some questions about the topic. Asking the student to touch five parts of body. Teacher asked him to touch parts of body (hair, eyes, nose, lips, ears). ● Teacher asked him about the amount of parts of body he has. ● Then, watching a video in the Literacy App. <p>Following Up Activities</p> <p>Whilst Activity</p> <ul style="list-style-type: none"> ● Introduction: The teacher introduces further five parts of body by using Quiz activity in Literacy Quest Application ● Activities: Answering a quiz about five parts of body. 	<p>Media Used: Literacy Quest “Recap Video of Body Parts”</p> <p>Focused Skills: focus skills, interaction skill.</p> <p>Media Used: Literacy Quest “Quiz”</p> <p>Focused Skills: writing, reading, social communication.</p>

		<ul style="list-style-type: none"> ● Listening to correct pronunciation of those five parts of body. ● Reading five simple sentences about those five parts of body. ● Doing some activities in the Apps with tablet, matching words with pictures, tracing words. ● Teacher asked him to guess the pictures in the right side of the screen and close the words in the left side during “the matching activities”. ● Teacher asked him to read the words in the left side and close the pictures in the right side. ● Before starting to write or trace the words, the teacher asked him to guess the picture provided and read the word. ● Teacher with clear and strong instruction asked him to write letter by letter neatly. ● MS2SML then got ready to do tracing words activity about previous five parts of body. ● Responding to correct expression to answer questions about those previous learned parts of body conditions. ● Practicing the simple talk with the teacher about asking and giving information about body condition. ● Following Up Activity 	
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		<p>Post Activity</p> <ul style="list-style-type: none"> • Games: Arranging Jumbled Puzzle with teacher's instruction • Rewards: Playing take and drop games as a reward with teacher's instruction. <p>Following Up Activity</p>	<p>Media Used: Printed Puzzle</p> <p>Focused Skills: vocabulary building, speaking (singing), focus skill on teachers' instructions while doing the puzzle and imitating the correct pronunciation in singing a song.</p>
	Result	<ul style="list-style-type: none"> • SML feels so excited about the apps. He smiles and looks so happy when the teacher explain that he will learn with tablet and do some activities inside the apps. Quite same with JVT and SML also over excited to gadget. The teacher has to work a little bit hard with Samuel because he is a new comer in the academic class with lack of focus and speech problem. However, he can finish the activities well with more practice. Here the researcher found that SML needs to improve his focus more. • Baseline: lack of English vocabulary about body parts, lack of focus, over excited to gadget, less motoric control. 	<p>NB: combining reading, writing, and simple speaking activities assisted by digital interactive media specifically designed to meet the characteristics of students with ASD can develop student's basic literacy and communication skills well. It can be seen from the activities and the result of activities explained in the teaching and learning activities columns.</p>

		<ul style="list-style-type: none"> After treatment: start to learn new vocabularies, can memories the vocabulary, calm down in front of the gadget. 	
3.	<p>Name: MS3LKM</p> <p>Age: 15 years old</p> <p>Gender: Male</p> <p>Academic Level: Prevocational</p> <p>Diagnose: Autism</p> <p>Characteristics: Focus problem, Sensory tactile, articulation problem.</p> <p>Favourite Activities:</p>	<p>Pre-Activity</p> <ul style="list-style-type: none"> Greeting: the teacher greets the student expressively Recap: The teacher explains about the topic “Parts of Body”. Asking the student to touch five parts of body. Teacher asked him to touch parts of body (hair, eyes, nose, lips, ears). Teacher asked him about the amount of parts of body he has. Then, watching a video in the Literacy App. <p>Whilst Activity</p> <ul style="list-style-type: none"> Introduction: The teacher introduces further five parts of body by using Quiz activity in Literacy Quest Application Activities: Answering a quiz about five parts of body. 	<p>Media Used: Literacy Quest “Recap Video of Body Parts”</p> <p>Focused Skills: focus skills, interaction skill.</p> <p>Media Used: Literacy Quest “Quiz”</p> <p>Focused Skills: writing, reading, social communication.</p>

		<ul style="list-style-type: none"> ● Listening to correct pronunciation of those five parts of body. ● Reading five simple sentences about those five parts of body. ● Doing some activities in the Apps with tablet, matching words with pictures, tracing words. ● Teacher asked him to guess the pictures in the right side of the screen and close the words in the left side during “the matching activities”. ● Teacher asked him to read the words in the left side and close the pictures in the right side. ● Before start to write or trace the words, the teacher asked him to guess the picture provided and read the word. ● Teacher with clear and strong instruction asked him to write letter by letter neatly. ● SML then got ready to do tracing words activity about previous five parts of body. ● Responding to correct expression to answer questions about those previous learned parts of body conditions. ● Practicing the simple talk with the teacher about asking and giving information about body condition. 	
		Post Activity	Media Used: Printed Puzzle

		<p>Games:</p> <p>Reward:</p> <p>Drag and Drop</p> <p>Following Up Activity</p> <ul style="list-style-type: none"> Put puzzle in the correct place about the topic 	<p>Focused Skills: vocabulary building, speaking (singing), focus skill on teachers' instructions while doing the puzzle and imitating the correct pronunciation in singing a song.</p>
	Result □	<ul style="list-style-type: none"> MS3LKM feels less excited about the apps rather than the other students. He looks flat and only said "ok" when the teacher explained that he will learn with tablet and do some activities inside the apps. Different from MS1JWT and MS2SML who are over excited to gadget, MS3LKM looks so calm but he loses his focus at the beginning of the activity with the apps. The teacher has to work a little bit hard with MS3LKM because he is a teenager with Autism with late intervention. Therefore, he just finished oral and behaviour treatment for being able to enter academic class. He was still new in academic class, that's why he was still struggling to read. Other problems as well faced by him were writing because of he was having sensory tactile, speaking because he was having articulation problem, and sometime in reading because he was having focus problem. Those problems could be covered up by the use of 	<p>NB: combining reading, writing, and simple speaking activities assisted by digital interactive media specifically designed to meet the characteristics of students with ASD can develop student's basic literacy and communication skills well. It can be seen from the activities and the result of activities explained in the teaching and learning activities columns.</p>

		<p>Literacy Quest App because it can be use repeatedly. The use of pictures, audios, short videos, simple sentences with the most used words for daily interactions. He was benefitted so much by all elements of this app. Therefore, he can perform better each day during the observation period. At the end, he can finish the activities well with more practice and teacher guidance.</p> <ul style="list-style-type: none"> ● Baseline: lack of vocabulary, lack of focus, lack of sensory tactile control. ● After treatment: start to learn new vocabularies, can memories the vocabulary, pronouncing the words and sentences better, can control sensory tactile (carefully touching the tab screen, using the tab pen, and having better writing). 	
	Important notes	<ul style="list-style-type: none"> ● Rewards Alert in Malaysia ● Steps in Teaching and Learning Process in Malaysia: Greet-recap-intro-activities-games-rewards. 	<p>Only give reward at the end of the lesson for approximately 5 minutes depending on students' behaviour during de learning process.</p> <p>Screen time is a form of reward.</p> <p>Giving reward should be as minimal as possible to avoid addiction (like students will only learn just after</p>

			they are given reward). Reward should be faded along the way.
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Appendix 5. Questionnaire of Media and Content Experts Validation

1ST Judge of Questionnaire of Media and Content Experts Validation

Name Kadek Sintya Dewi

NIM 2239041005

Topic Digital Interactive Media Development

Title Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)

Application Literacy Quest

Validator Prof. Dr. Ketut Agustini,S.Si.,M.Si

Institution Universitas Pendidikan Ganesha

1. Introduction

This study is conducted to develop a Digital Interactive Media for Students with ASD at a private elementary school in North Part of Bali. Based on preliminary observation, there is no specific digital interactive media used during the screen time. It is urgently needed to give the students with ASD better learning experiences. Since they have high functioning ability that they are able to read, write and speak in English, therefore, giving 15 minutes screen time with meaningful digital interactive video will be so beneficial rather than to have YouTube video only. The existing need will be solved by developing Digital Interactive Media based android and web application system by applying ADDIE Research and Design (RnD) Development Model. The development of the application will be used to help students to learn Basic English

Literacy through several digital activities that can be accessed from a smartphone (through an app that can be downloaded from the Play store). The material selected are vocabularies in the topics “My Body, My Family, My Hobby, My Environment, and My Daily Activities”. The product was validated through adapting content and media expert judgment proposed by Findawati and Suprianto, (2014) and the User Experience Questionnaire (UEQ) adopted from Hinderks et al., (2019).

According to Wahono (2006) and Findawati & Suprianto (2014) some aspects of the learning media evaluation covers; software engineering aspects and learning design aspects.

(1) Software Engineering Aspects: Effective and efficient in the development and use of the learning media. Reliable (reliability). Maintainable (can be managed easily for its maintenance). Usability (easy to use and simple in operation). The accuracy of selecting the type of application/software/tool for development. Compatibility: learning media can be installed/run on a variety of existing hardware and software. Learning media program packaging is integrated and easy to execute. Complete media learning program documentation includes: installation instructions: (clear, brief, complete), troubleshooting: clear, structured, and anticipative, and program design: clear. Reusable: part or the entire learning media program can be reused to develop other learning media.

(2) Design aspects of learning: clarity of the purpose of learning. Relevance of learning objectives with SK/KD/Curriculum. The scope and depth of the purpose of learning. Accuracy of application of learning strategies. Interactivity. Learning motivation. Contextuality and topicality. The availability and quality of the learning media material. Material compatibility with the purpose of learning. The depths of matter. Easy to understand. Systematic, riddle and logical circuit clear. Clear descriptions, illustrations, examples, simulations, and exercises. Consistency of evaluation with learning objectives. The accuracy and precision of the evaluation tool. Feedback on evaluation results.

2. The Dimension of Each Item Statement

According to (Findawati and Suprianto, 2014) there are two dimensions of evaluating learning media including Software Engineering aspect and Learning Design aspect. The software engineering aspect measures the effectiveness and efficiency of the development of learning media include several dimensions such as reliability, maintainability, usability, appropriateness, compatibility. Meanwhile, learning design aspect measures the clarity and relevancy between learning objective and content of the media. The aspect includes the dimension of clarity, relevancy, depth, appropriateness, interactivity, motivation.

NO	DIMENSION	DEFINITION
1	Software Engineering Aspect (Media Expert Judgements)	Software engineering aspect is defined as the degree of the chosen platform appropriateness to the development of the product.
2	Learning Design Aspect (Content Expert Judgements)	Learning design aspect is defined as the degree of learning objective appropriateness to content of the media

NO	DIMENSION	SUB DIMENSION	DEFINITION
1	Software Engineering	Reliability	The degree of how reliable is the media.
		Readability	The degree of how the readability of the text available in the media.

		Compatibility	The degree of how compatible the media can be played.
		Appropriate selection of tools	The degree of how the media are appropriate with the content.
2	Learning Design	Clarity	The degree of how clear is the learning objectives.
		Interactivity	The degree of how the media interact with the users.
		Contextuality	The degree of how good the media represents the learning material.
		Suitability	The degree of how suitable the media are.
		Convenient	The degree of how easy to access the media.
		Usability	The degree of how convenient the media is to be accessed.

3. Blueprint of Media Expert Judgements

3.1 Content Expert Evaluation Sheet

The content expert evaluation sheet is filled by expert judges. Give a checklist mark in the scoring column and if there are comments, please fill the comment column. The content expert evaluation sheet is adapted from Findawati and Suprianto (2014).

No	Instrument's Name	Indicators	Item Statements
1.	Content Expert evaluation sheet.	Clarity	1. The objective is clear and simple 2. The objective considers students' with ASD characteristics and needs
		Interactivity	3. Interactivity in material design 4. Following specification theory needed by students with ASD to meet proper interactivity
		Contextuality	5. Learning Objectives are in accordance with the IEPs/ Rencana Pembelajaran Individual (PPI) Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis) and Learning Objectives Flow. 6. The learning material in accordance with the IEPs/ Rencana Pembelajaran Individual (PPI) Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis).
		Usability	7. Compatibility of the learning strategies.

			8. Ease to understand learning.
		Consistency	9. Appropriateness of the digital interactive media with the learning materials. 10. Appropriateness of the digital interactive media with the topic of material. 11. The accuracy and consistency of the digital interactive media.

3.2 Media Expert Evaluation Sheet

The media expert evaluation sheet is filled by expert judges. Give a checklist mark in the scoring column and if there are comments, please fill the comment column. The media expert evaluation sheet is adapted from Findawati and Suprianto (2014)

No	Instrument's Name	Indicators	Item Statements
1	Media Expert evaluation sheet	Reliability	1. Instructions clarity on the use of the program for students with ASD 2. Effectiveness of the digital interactive media to support students with ASD learning
		Compatibility	3. Compatible with smartphones and web

			4. The ease of application management
		Interactivity	5. Readability of text/writing 6. The display's quality 7. The creativity of the design 8. Color composition
		Appropriateness	9. Appropriate selection of application or software or tool types for development 10. Appropriate selection of supporting elements for students with ASD: audio, visual, and reward system.

4. Original Content Expert Judgement

(a) Content Expert Judgement

No	Pernyataan	Sangat Baik	Baik	Cukup Baik	Kurang Baik	Tidak Baik	Expert's Evaluation		Note
							Relevant	Irrelevant	
1	Kejelasan tujuan pembelajaran						✓		
2	Tujuan pembelajaran								

	dibuat dengan mempertimbangkan karakter dan kebutuhan siswa dengan hambatan intelektual / Autis								
4	Media menyajikan disain isi materi yang menarik dan interaktif								
5	Media dibuat dengan mengikuti teori spesifikasi yang dibutuhkan oleh siswa dengan hambatan intelektual / Autis								
6	Relevansi materi pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema/						✓		

	Program Pembelajaran Individual (PPI) untuk Anak Berkebutuhan Khusus (Autis)								
7	Cakupan dan kedalaman materi sesuai dengan level anak berkebutuhan khusus (Autis)						✓		
8	Ketepatan aktivitas yang disajikan menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara						✓		
9	Interaktivitas						✓		
10	Pemberian motivasi belajar						✓		
11	Kontekstualitas dan aktualitas						✓		

12	Kelengkapan dan kualitas digital interaktif media untuk menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara						✓		
13	Kesesuaian materi dengan pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)						✓		
14	Kedalaman materi dengan level Anak Berkebutuhan Khusus (Autis)						✓		
15	Kemudahan untuk dipahami						✓		

16	Sistematis, runut, dan alur logika jelas.						✓		
17	Kejelasan instruksi, contoh, simulasi dan latihan.						✓		
18	Konsistensi evaluasi dengan Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)						✓		
19	Ketepatan dan ketetapan alat evaluasi						✓		
20	Pemberian umpan balik terhadap hasil evaluasi						✓		

(b) Media Expert Judgement

No	Pernyataan	Sangat Baik	Baik	Cukup Baik	Kurang Baik	Tidak Baik	Expert's Evaluation		Note
							Relevant	Irrelevant	
1	Kejelasan petunjuk penggunaan aplikasi						✓		
2	Keefektifan media interaktif digital dalam mendukung pembelajaran untuk siswa dengan ASD								
3	Aplikasi media interaktif digital cocok dengan pemasangan web dan gawai cerdas (smartphones)						✓		
4	Kemudahan pengelolaan								

	aplikasi media interaktif digital								
5	<p>Pemilihan sistem yang tepat untuk mengembangkan aplikasi media interaktif digital (maksudnya adalah “android and web application system” yg dipilih berdasarkan hasil survey penggunaan gawai pada anak dengan dengan hambatan intelektual / Autis dirumahnya masing-masing)</p>								

5	Keterbacaan teks/tulisan						✓		
6	Kualitas tampilan gambar						✓		
7	Sajian animasi						✓		
8	Komposisi warna						✓		
9	Keterjelasan suara						✓		
10	Daya dukung suara / music						✓		

5. INSTRUMENT VALIDATION

The quality of the digital interactive media was determined by product evaluation based on experts' judgement. This evaluation was used as a guidance for further product development. The expert judgment sheet contains several aspects that represent the materials namely; content evaluation and media evaluation. The content evaluation sheet is used to assess the product that is used to teach vocabulary meanwhile the media evaluation sheet will be used to assess the guidance on how to use the product. Both product evaluation sheets are adapted from Findawati and Suprianto (2014) which already represented the key elements of required data to show whether product of digital interactive media had fulfilled the standard quality or not. The following tables are the content expert evaluation sheet and media expert evaluation sheet.



5.1 Content Expert Evaluation

This evaluation sheet is filled by expert judges. Give a checklist mark (✓) in the scoring column and if there are comments, they can be filled in the comment column.

No	Instrument's Name	Item Statements	Relevant	Irrelevant	Comments
1.	Content Expert evaluation sheet.	1. The objective is clear and simple	✓		
		2. Interactivity in design	✓		
		3. Learning Objectives are in accordance with the Individual Education Plan IEPs (<i>Alur Tujuan Pembelajaran</i>) Learning Objectives Flow or syllabus	✓		
		4. The learning material in accordance with the Basic Competence (KD)	✓		
		5. Convenience to access	✓		

		6. Easy to understand	✓		
		7. The material represents the learning objectives.	✓		
		8. Suitability of the game with the topic of material.	✓		
		9. The accuracy and consistency of the Digital Interactive Media.	✓		

5.2 Media Expert Evaluation Sheet

The media expert evaluation sheet is filled by expert judges. Give a checklist mark in the scoring column and if there are comments, please fill the comment column. The media expert evaluation sheet is adapted from Findawati & Suprianto, (2014)

No	Instrument's Name	Item Statements	Relevant	Irrelevant	Comment
1	Media Expert evaluation sheet	1. Clarity Instructions use the program	✓		
		2. Effectiveness of the game	✓		
		3. Usability in smartphones and web	✓		
		4. The ease of application management	✓		

		5. Readability of text/writing	✓		
		6. The display's quality	✓		
		7. The creativity of the design	✓		
		8. Color composition	✓		
		9. Appropriate selection of application or software or tool types for development	✓		

Singaraja, 18 October 2024



Prof. Dr. Ketut Agustini, S.Si., M.Si
NIP. 197408012000032001

2ND Judge of Questionnaire of Media and Content Experts Validation

Name Kadek Sintya Dewi

NIM 2239041005

Topic Digital Interactive Media Development

Title Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)

Application Literacy Quest

Validator Dr. I Gede Partha Sindu, S.Pd., M.Pd.

Institution Universitas Pendidikan Ganesha

1. Introduction

This study is conducted to develop a Digital Interactive Media for Students with ASD at a private elementary school in North Part of Bali. Based on preliminary observation, there is no specific digital interactive media used during the screen time. It is urgently needed to give the students with ASD better learning experiences. Since they have high functioning ability that they are able to read, write and speak in English, therefore, giving 15 minutes screen time with meaningful digital interactive video will be so beneficial rather than to have YouTube video only. The existing need will be solved by developing Digital Interactive Media based android and web application system by applying ADDIE Research and Design (RnD) Development Model. The development of the application will be used to help students to learn Basic English Literacy through several digital activities that can be accessed from a smartphone (through an app that can be downloaded from the Play

store). The material selected are vocabularies in the topics “My Body, My Family, My Hobby, My Environment, and My Daily Activities”. The product was validated through adapting content and media expert judgment proposed by Findawati and Suprianto, (2014) and the User Experience Questionnaire (UEQ) adopted from Hinderks et al., (2019).

According to Wahono (2006) and Findawati & Suprianto (2014) some aspects of the learning media evaluation covers; software engineering aspects and learning design aspects.

(1) Software Engineering Aspects: Effective and efficient in the development and use of the learning media. Reliable (reliability). Maintainable (can be managed easily for its maintenance). Usability (easy to use and simple in operation). The accuracy of selecting the type of application/software/tool for development. Compatibility: learning media can be installed/run on a variety of existing hardware and software. Learning media program packaging is integrated and easy to execute. Complete media learning program documentation includes: installation instructions: (clear, brief, complete), troubleshooting: clear, structured, and anticipative, and program design: clear. Reusable: part or the entire learning media program can be reused to develop other learning media.

(2) Design aspects of learning: clarity of the purpose of learning. Relevance of learning objectives with SK/KD/Curriculum. The scope and depth of the purpose of learning. Accuracy of application of learning strategies. Interactivity. Learning motivation. Contextuality and topicality. The availability and quality of the learning media material. Material compatibility with the purpose of learning. The depths of matter. Easy to understand. Systematic, riddle and logical circuit clear. Clear descriptions, illustrations, examples, simulations, and exercises. Consistency of evaluation with learning objectives. The accuracy and precision of the evaluation tool. Feedback on evaluation results.

2. The Dimension of Each Item Statement

According to (Findawati and Suprianto, 2014) there are two dimensions of evaluating learning media including Software Engineering aspect and Learning Design aspect. The software engineering aspect measures the effectiveness and efficiency of the development of learning media include several dimensions such as reliability, maintainability, usability, appropriateness, compatibility. Meanwhile, learning design

aspect measures the clarity and relevancy between learning objective and content of the media. The aspect includes the dimension of clarity, relevancy, depth, appropriateness, interactivity, motivation.

NO	DIMENSION	DEFINITION
1	Software Engineering Aspect (Media Expert Judgements)	Software engineering aspect is defined as the degree of the chosen platform appropriateness to the development of the product.
2	Learning Design Aspect (Content Expert Judgements)	Learning design aspect is defined as the degree of learning objective appropriateness to content of the media

NO	DIMENSION	SUB DIMENSION	DEFINITION
1	Software Engineering	Reliability	The degree of how reliable is the media.
		Readability	The degree of how the readability of the text available in the media.
		Compatibility	The degree of how compatible the media can be played.

		Appropriate selection of tools	The degree of how the media are appropriate with the content.
2	Learning Design	Clarity	The degree of how clear is the learning objectives.
		Interactivity	The degree of how the media interact with the users.
		Contextuality	The degree of how good the media represents the learning material.
		Suitability	The degree of how suitable the media are.
		Convenient	The degree of how easy to access the media.
		Usability	The degree of how convenient the media is to be accessed.

3. Blueprint of Media Expert Judgements

5.1 Content Expert Evaluation Sheet

The content expert evaluation sheet is filled by expert judges. Give a checklist mark in the scoring column and if there are comments, please fill the comment column. The content expert evaluation sheet is adapted from Findawati and Suprianto (2014).

No	Instrument's Name	Indicators	Item Statements
1.	Content Expert evaluation sheet.	Clarity	1. The objective is clear and simple 2. The objective considers students' with ASD characteristics and needs
		Interactivity	3. Interactivity in material design 4. Following specification theory needed by students with ASD to meet proper interactivity
		Contextuality	5. Learning Objectives are in accordance with the IEPs/ Rencana Pembelajaran Individual (PPI) Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis) and Learning Objectives Flow. 6. The learning material in accordance with the IEPs/ Rencana Pembelajaran Individual (PPI) Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis).

		Usability	7. Compatibility of the learning strategies. 8. Ease to understand learning.
		Consistency	9. Appropriateness of the digital interactive media with the learning materials. 10. Appropriateness of the digital interactive media with the topic of material. 11. The accuracy and consistency of the digital interactive media.

5.2 Media Expert Evaluation Sheet

The media expert evaluation sheet is filled by expert judges. Give a checklist mark in the scoring column and if there are comments, please fill the comment column. The media expert evaluation sheet is adapted from Findawati and Suprianto (2014)

No	Instrument's Name	Indicators	Item Statements
1	Media Expert evaluation sheet	Reliability	1. Instructions clarity on the use of the program for students with ASD 2. Effectiveness of the digital interactive media to support students with ASD learning

1	Kejelasan tujuan pembelajaran						✓		
2	Tujuan pembelajaran dibuat dengan mempertimbangkan karakter dan kebutuhan siswa dengan hambatan intelektual / Autis								
4	Media menyajikan disain isi materi yang menarik dan interaktif								
5	Media dibuat dengan mengikuti teori spesifikasi yang dibutuhkan oleh siswa dengan hambatan intelektual / Autis								
6	Relevansi materi pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana						✓		

	Pembelajaran Individual Berbasis Tema/ Program Pembelajaran Individual (PPI) untuk Anak Berkebutuhan Khusus (Autis)								
7	Cakupan dan kedalaman materi sesuai dengan level anak berkebutuhan khusus (Autis)						✓		
8	Ketepatan aktivitas yang disajikan menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara						✓		
9	Interaktivitas						✓		

10	Pemberian motivasi belajar						✓		
11	Kontekstualitas dan aktualitas						✓		
12	Kelengkapan dan kualitas digital interaktif media untuk menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara						✓		
13	Kesesuaian materi dengan pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)						✓		
14	Kedalaman materi dengan level Anak						✓		

	Berkebutuhan Khusus (Autis)								
15	Kemudahan untuk dipahami						✓		
16	Sistematis, runut, dan alur logika jelas.						✓		
17	Kejelasan instruksi, contoh, simulasi dan latihan.						✓		
18	Konsistensi evaluasi dengan Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)						✓		
19	Ketepatan dan ketetapan alat evaluasi						✓		
20	Pemberian umpan balik terhadap hasil evaluasi						✓		

(c) Media Expert Judgement

No	Pernyataan	Sangat Baik	Baik	Cukup Baik	Kurang Baik	Tidak Baik	Expert's Evaluation		Note
							Relevant	Irrelevant	
1	Kejelasan petunjuk penggunaan aplikasi						✓		
2	Keefektifan media interaktif digital dalam mendukung pembelajaran untuk siswa dengan ASD								
3	Aplikasi media interaktif digital cocok dengan pemasangan web dan gawai cerdas (smartphones)						✓		
4	Kemudahan pengelolaan								

	aplikasi media interaktif digital								
5	Pemilihan sistem yang tepat untuk mengembangkan aplikasi media interaktif digital (maksudnya adalah “android and web application system” yg dipilih berdasarkan hasil survey penggunaan gawai pada anak dengan hambatan intelektual / Autis dirumahnya masing-masing)								
5	Keterbacaan teks/tulisan						✓		

6	Kualitas tampilan gambar						✓		
7	Sajian animasi						✓		
8	Komposisi warna						✓		
9	Keterjelasan suara						✓		
10	Daya dukung suara / music						✓		

7. INSTRUMENT VALIDATION

The quality of the digital interactive media was determined by product evaluation based on experts' judgement. This evaluation was used as a guidance for further product development. The expert judgment sheet contains several aspects that represent the materials namely; content evaluation and media evaluation. The content evaluation sheet is used to assess the product that is used to teach vocabulary meanwhile the media evaluation sheet will be used to assess the guidance on how to use the product. Both product evaluation sheets are adapted from Findawati and Suprianto (2014) which already represented the key elements of required data to show whether product of digital interactive media had fulfilled the standard quality or not. The following tables are the content expert evaluation sheet and media expert evaluation sheet.

5.1 Content Expert Evaluation

This evaluation sheet is filled by expert judges. Give a checklist mark (✓) in the scoring column and if there are comments, they can be filled in the comment column.

No	Instrument's Name	Item Statements	Relevant	Irrelevant	Comments
2.	Content Expert evaluation sheet.	1. The objective is clear and simple	✓		
		2. Interactivity in design	✓		
		3. Learning Objectives are in accordance with the Individual Education Plan IEPs (<i>Alur Tujuan Pembelajaran</i>) Learning Objectives Flow or syllabus	✓		
		4. The learning material in accordance with the Basic Competence (KD)	✓		
		5. Convenience to access	✓		
		6. Easy to understand	✓		

		7. The material represents the learning objectives.	✓		
		8. Suitability of the game with the topic of material.	✓		
		9. The accuracy and consistency of the Digital Interactive Media.	✓		

5.2 Media Expert Evaluation Sheet

The media expert evaluation sheet is filled by expert judges. Give a checklist mark in the scoring column and if there are comments, please fill the comment column. The media expert evaluation sheet is adapted from Findawati & Suprianto, (2014)

No	Instrument's Name	Item Statements	Relevant	Irrelevant	Comment
1	Media Expert evaluation sheet	1. Clarity Instructions use the program	✓		
		2. Effectiveness of the game	✓		
		3. Usability in smartphones and web	✓		
		4. The ease of application management	✓		
		5. Readability of text/writing	✓		

		6. The display's quality	✓		
		7. The creativity of the design	✓		
		8. Color composition	✓		
		9. Appropriate selection of application or software or tool types for development	✓		

Singaraja, 18 October 2024

Dr. I Gede Partha Sindu, S.Pd., M.Pd.
NIP. 197408012000032001

1) Learning Media Expert Questionnaire Validation

a.Cross Tabulation

		JUDGE I	
		Irrelevant	Relevant
JUDGE II	Irrelevant	A = 0	C = 0
	Relevant	B = 0	D = 10

b.Formula Calculation

Content Validity $\frac{10}{0+0+0+10} = \frac{10}{10} = 1$

2) Questionnaire of Content and Language Expert Validation

a.Cross Tabulation

		JUDGE I	
		Irrelevant	Relevant
JUDGE II	Irrelevant	A = 0	C = 0
	Relevant	B = 0	D = 20

b.Formula Calculation

Content Validity $\frac{25}{0+0+0+25} = \frac{20}{20} = 1$

Appendix 6. Media and Content Expert judgement sheet

MEDIA EXPERT JUDGEMENT SHEET

1ST JUDGE

Topic	Digital Interactive Media Development
Title	Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)
Software	Literacy Quest
Expert	Prof. Dr. Ketut Agustini,S.Si.,M.Si
Institution	Universitas Pendidikan Ganesha

Description

These evaluation sheets are used to judge the quality of Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD). The Digital Interactive Media developed to support or help shadow teachers in teaching basic English literacy to young learners with ASD. The material selected are vocabularies in the topics of “My Body, My Family, My Hobby, My Environment, and My Daily Activities” which were integrated to the media. Regarding this point, it is a necessity to get your response and suggestions about the content and media of this product.

1. Content Expert Evaluation

The content expert evaluation was adapted from Findawati and Suprianto,(2014).

Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan tujuan pembelajaran	✓					5
2	Tujuan pembelajaran dibuat dengan mempertimbangkan karakter dan kebutuhan siswa dengan hambatan intelektual / Autis	✓					5
4	Media menyajikan disain isi materi yang menarik dan interaktif	✓					5
5	Media dibuat dengan mengikuti teori spesifikasi yang dibutuhkan oleh	✓					5

	siswa dengan hambatan intelektual / Autis						
6	Relevansi materi pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema/ Program Pembelajaran Individual (PPI) untuk Anak Berkebutuhan Khusus (Autis)	✓					5
7	Cakupan dan kedalaman materi sesuai dengan level anak berkebutuhan khusus (Autis)	✓					5
8	Ketepatan aktivitas yang disajikan menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5
9	Interaktivitas	✓					5
10	Pemberian motivasi belajar	✓					5
11	Kontekstualitas dan aktualitas	✓					5
12	Kelengkapan dan kualitas digital interaktif media untuk menunjang literasi bahasa Inggris dasar meliputi;	✓					5

	aktivitas membaca, menulis dan berbicara						
13	Kesesuaian materi dengan pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)	✓					5
14	Kedalaman materi dengan level Anak Berkebutuhan Khusus (Autis)		✓				5
15	Kemudahan untuk dipahami		✓				5
16	Sistematis, runut, dan alur logika jelas.	✓					5
17	Kejelasan instruksi, contoh, simulasi dan latihan.		✓				5
18	Konsistensi evaluasi dengan Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)		✓				5
19	Ketepatan dan ketetapan alat evaluasi		✓				5

20	Pemberian umpan balik terhadap hasil evaluasi	✓					5
TOTAL							95

2. Media Expert Evaluation

The media expert evaluation was adapted from Findawati and Suprianto,(2014).

Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total

1	Kejelasan petunjuk penggunaan aplikasi	✓					
2	Keefektifan media interaktif digital dalam mendukung pembelajaran untuk siswa dengan ASD	✓					
3	Aplikasi media interaktif digital cocok dengan pemasangan web dan gawai cerdas (smartphones)		✓				
4	Kemudahan pengelolaan aplikasi media interaktif digital	✓					
5	Pemilihan sistem yang tepat untuk mengembangkan aplikasi media interaktif digital (maksudnya adalah “android and web application system” yg dipilih berdasarkan hasil survey penggunaan gawai pada anak dengan dengan hambatan intelektual / Autis dirumahnya masing-masing)		✓				
5	Keterbacaan teks/tulisan		✓				
6	Kualitas tampilan gambar	✓					
7	Sajian animasi		✓				
8	Komposisi warna	✓					
9	Keterjelasan suara	✓					

10	Daya dukung suara / music	✓					
TOTAL							46

Singaraja, 8 November 2024



Prof. Dr. Ketut Agustini, S.Si., M.Si
NIP. 197408012000032001



MEDIA EXPERT EVALUATION SHEET

Topic	Digital Interactive Media Development
Title	Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)
Software	“Literacy Quest”
Expert	Dr. I Gede Partha Sindu, S.Pd., M.Pd.
Institution	Universitas Pendidikan Ganesha

Description

These evaluation sheets are used to judge the quality of Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD). The Digital Interactive Media developed to support or help shadow teachers in teaching basic English literacy to young learners with ASD. The material selected are vocabularies in the topics of “My Body, My Family, My Hobby, My Environment, and My Daily Activities” which were integrated to the media. Regarding this point, it is a necessity to get your response and suggestions about the content and media of this product.

1. Content Expert Evaluation

The content expert evaluation was adapted from Findawati and Suprianto,(2014).

Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan tujuan pembelajaran	✓					5
2	Tujuan pembelajaran dibuat dengan mempertimbangkan karakter dan kebutuhan siswa dengan hambatan intelektual / Autis	✓					5
4	Media menyajikan disain isi materi yang menarik dan interaktif	✓					5
5	Media dibuat dengan mengikuti teori spesifikasi yang dibutuhkan oleh siswa dengan hambatan intelektual / Autis	✓					5

6	Relevansi materi pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema/ Program Pembelajaran Individual (PPI) untuk Anak Berkebutuhan Khusus (Autis)	✓					5
7	Cakupan dan kedalaman materi sesuai dengan level anak berkebutuhan khusus (Autis)	✓					5
8	Ketepatan aktivitas yang disajikan menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5
9	Interaktivitas	✓					5
10	Pemberian motivasi belajar	✓					5
11	Kontekstualitas dan aktualitas	✓					5
12	Kelengkapan dan kualitas digital interaktif media untuk menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5

13	Kesesuaian materi dengan pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)	✓					5
14	Kedalaman materi dengan level Anak Berkebutuhan Khusus (Autis)		✓				5
15	Kemudahan untuk dipahami		✓				5
16	Sistematis, runut, dan alur logika jelas.	✓					5
17	Kejelasan instruksi, contoh, simulasi dan latihan.		✓				5
18	Konsistensi evaluasi dengan Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)		✓				5
19	Ketepatan dan ketetapan alat evaluasi		✓				5
20	Pemberian umpan balik terhadap hasil evaluasi	✓					5
TOTAL							95

2. Media Expert Evaluation

The media expert evaluation was adapted from Findawati and Suprianto,(2014).


Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information;
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan petunjuk penggunaan aplikasi	✓					
2	Keefektifan media interaktif digital dalam mendukung pembelajaran untuk siswa dengan ASD	✓					
3	Aplikasi media interaktif digital cocok dengan pemasangan web dan gawai cerdas (smartphones)		✓				

4	Kemudahan pengelolaan aplikasi media interaktif digital	✓					
5	Pemilihan sistem yang tepat untuk mengembangkan aplikasi media interaktif digital (maksudnya adalah “android and web application system” yg dipilih berdasarkan hasil survey penggunaan gawai pada anak dengan dengan hambatan intelektual / Autis dirumahnya masing-masing)		✓				
5	Keterbacaan teks/tulisan		✓				
6	Kualitas tampilan gambar	✓					
7	Sajian animasi		✓				
8	Komposisi warna	✓					
9	Keterjelasan suara		✓				
10	Daya dukung suara / music	✓					

Singaraja, 8 November 2024


 Dr. I Gede Partha Sindu, S.Pd., M.Pd.
 NIP. 197408012000032001

CONTENT EXPERT JUDGEMENT SHEET

Topic	Digital Interactive Media Development
Title	Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)
Software	“Literacy Quest”
Expert	Associate Prof. Thilagavathi Shanmuganathan, Ph.D
Institution	Universiti of Malaya

Description

These evaluation sheets are used to judge the quality of Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD). The Digital Interactive Media developed to support or help shadow teachers in teaching basic English literacy to young learners with ASD. The material selected are vocabularies in the topics of “My Body, My Family, My Hobby, My Environment, and My Daily Activities” which were integrated to the media. Regarding this point, it is a necessity to get your response and suggestions about the content and media of this product.

1. Content Expert Evaluation

The content expert evaluation was adapted from Findawati and Suprianto,(2014).

Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information;
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.



No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan tujuan pembelajaran	✓					5
2	Tujuan pembelajaran dibuat dengan mempertimbangkan karakter dan kebutuhan siswa dengan hambatan intelektual / Autis	✓					5
4	Media menyajikan disain isi materi yang menarik dan interaktif	✓					5

5	Media dibuat dengan mengikuti teori spesifikasi yang dibutuhkan oleh siswa dengan hambatan intelektual / Autis	✓					5
6	Relevansi materi pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema/ Program Pembelajaran Individual (PPI) untuk Anak Berkebutuhan Khusus (Autis)	✓					5
7	Cakupan dan kedalaman materi sesuai dengan level anak berkebutuhan khusus (Autis)	✓					5
8	Ketepatan aktivitas yang disajikan menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5
9	Interaktivitas	✓					5
10	Pemberian motivasi belajar	✓					5
11	Kontekstualitas dan aktualitas	✓					5

12	Kelengkapan dan kualitas digital interaktif media untuk menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5
13	Kesesuaian materi dengan pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)	✓					5
14	Kedalaman materi dengan level Anak Berkebutuhan Khusus (Autis)		✓				5
15	Kemudahan untuk dipahami		✓				5
16	Sistematis, runut, dan alur logika jelas.	✓					5
17	Kejelasan instruksi, contoh, simulasi dan latihan.		✓				5
18	Konsistensi evaluasi dengan Rencana Pembelajaran Individual Berbasis Tema untuk Anak Berkebutuhan Khusus (Autis)		✓				5

19	Ketepatan dan ketetapan alat evaluasi		✓				5
20	Pemberian umpan balik terhadap hasil evaluasi	✓					5
TOTAL							95



2. Media Expert Evaluation

The media expert evaluation was adapted from Findawati and Suprianto,(2014).

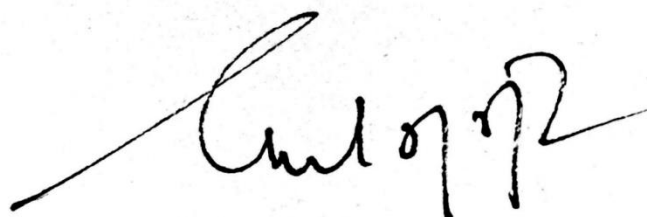
Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information;
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan petunjuk penggunaan aplikasi	✓					
2	Keefektifan media interaktif digital dalam mendukung pembelajaran untuk siswa dengan ASD	✓					
3	Aplikasi media interaktif digital cocok dengan pemasangan web dan gawai cerdas (smartphones)		✓				
4	Kemudahan pengelolaan aplikasi media interaktif digital	✓					

5	Pemilihan sistem yang tepat untuk mengembangkan aplikasi media interaktif digital (maksudnya adalah “android and web application system” yg dipilih berdasarkan hasil survey penggunaan gawai pada anak dengan dengan hambatan intelektual / Autis dirumahnya masing-masing)		✓				
5	Keterbacaan teks/tulisan		✓				
6	Kualitas tampilan gambar	✓					
7	Sajian animasi		✓				
8	Komposisi warna	✓					
9	Keterjelasan suara	✓					
10	Daya dukung suara / music	✓					

Singaraja, 8 November 2024



Associate Prof. Thilagavathi Shanmuganathan, Ph.D

CONTENT EXPERT JUDGEMENT SHEET

Topic	Digital Interactive Media Development
Title	Developing Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD)
Software	Literacy Quest
Expert	Dr. Sharala Subramaniam
Institution	Taylor's University Malaysia

Description

These evaluation sheets are used to judge the quality of Digital Interactive Media to Teach Basic Literacy and Communication in English As A Foreign Language for Young Learners with Autism Spectrum Disorder (ASD). The Digital Interactive Media developed to support or help shadow teachers in teaching basic English literacy to young learners with ASD. The material selected are vocabularies in the topics of “My Body, My Family, My Hobby, My Environment, and My Daily Activities” which were integrated to the media. Regarding this point, it is a necessity to get your response and suggestions about the content and media of this product.

1. Content Expert Evaluation

The content expert evaluation was adapted from Findawati and Suprianto,(2014).

Instruction

1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information
(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Baik (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan tujuan pembelajaran	✓					5
2	Tujuan pembelajaran dibuat dengan mempertimbangkan karakter dan kebutuhan siswa dengan hambatan intelektual / Autis	✓					5
4	Media menyajikan disain isi materi yang menarik dan interaktif	✓					5
5	Media dibuat dengan mengikuti teori spesifikasi yang dibutuhkan oleh siswa dengan hambatan intelektual / Autis	✓					5

6	Relevansi materi pada Digital Interaktif Media “Literacy Quest” dengan IEPs/ Rencana Pembelajaran Individual Berbasis Tema/ Program Pembelajaran Individual (PPI) untuk Anak Berkebutuhan Khusus (Autis)	✓					5
7	Cakupan dan kedalaman materi sesuai dengan level anak berkebutuhan khusus (Autis)	✓					5
8	Ketepatan aktivitas yang disajikan menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5
9	Interaktivitas	✓					5
10	Pemberian motivasi belajar	✓					5
11	Kontekstualitas dan aktualitas	✓					5
12	Kelengkapan dan kualitas digital interaktif media untuk menunjang literasi bahasa Inggris dasar meliputi; aktivitas membaca, menulis dan berbicara	✓					5

2. Media Expert Evaluation

The media expert evaluation was adapted from Findawati and Suprianto,(2014).

Instruction

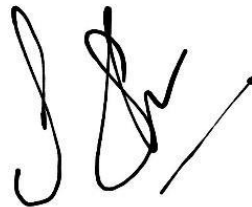
1. This evaluation sheet is filled by expert judges. Give checklist mark (✓) in the scoring column and if there are comments. It can be filled in the comment column.
2. There are 5 scopes of scoring for every component.
3. Give checklist mark in the scoring column with the following information

(5) Excellent (4) Good (3) Average (2) Poor (1) Very Poor.

No	Pernyataan	Sangat Sesuai (5)	Baik (4)	Cukup Baik (3)	Kurang Baik (2)	Tidak Baik (1)	Total
1	Kejelasan petunjuk penggunaan aplikasi	✓					
2	Keefektifan media interaktif digital dalam mendukung pembelajaran untuk siswa dengan ASD	✓					
3	Aplikasi media interaktif digital cocok dengan pemasangan web dan gawai cerdas (smartphones)		✓				
4	Kemudahan pengelolaan aplikasi media interaktif digital	✓					

5	Pemilihan sistem yang tepat untuk mengembangkan aplikasi media interaktif digital (maksudnya adalah “android and web application system” yg dipilih berdasarkan hasil survey penggunaan gawai pada anak dengan dengan hambatan intelektual / Autis dirumahnya masing-masing)		✓				
5	Keterbacaan teks/tulisan		✓				
6	Kualitas tampilan gambar	✓					
7	Sajian animasi		✓				
8	Komposisi warna	✓					
9	Keterjelasan suara		✓				
10	Daya dukung suara / music	✓					

Singaraja, 8 November 2024



Dr. Sharala Subramaniam

Appendix 7. The analysis of measuring the quality of the media

The analysis of measuring the quality of the product is shown as follows:

1. Content evaluation sheet from judge 1

$$\text{Percentage} = \frac{\text{Actual Score}}{\text{SMI}} \times 100\% = \frac{95}{100} \times 100\% = 95\%$$

2. Content evaluation sheet from the judge 2

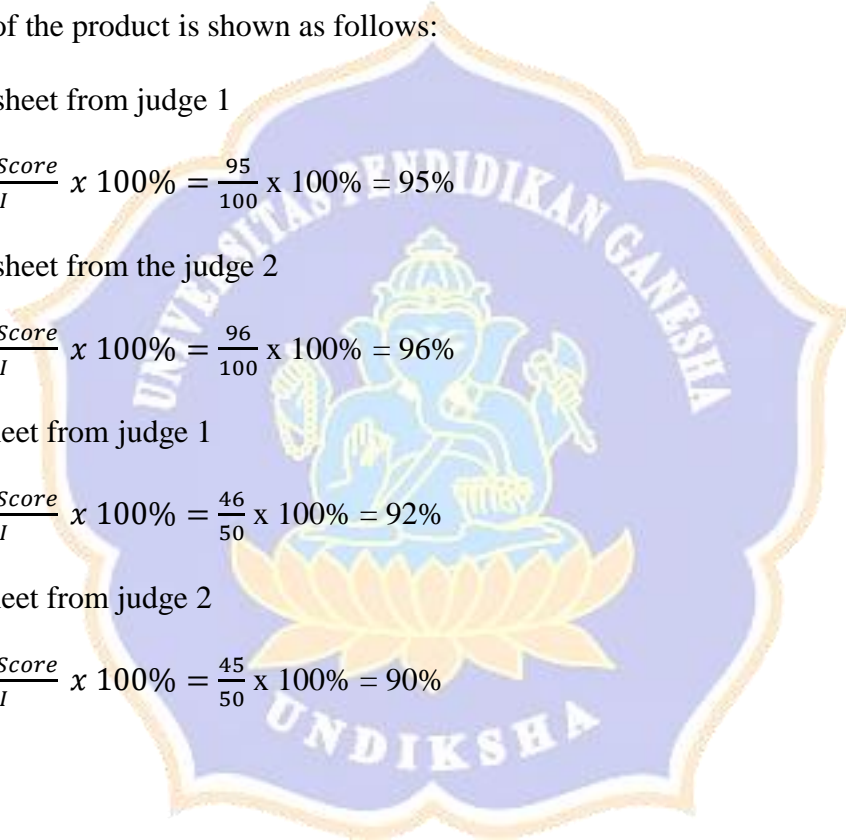
$$\text{Percentage} = \frac{\text{Actual Score}}{\text{SMI}} \times 100\% = \frac{96}{100} \times 100\% = 96\%$$

3. Media evaluation sheet from judge 1

$$\text{Percentage} = \frac{\text{Actual Score}}{\text{SMI}} \times 100\% = \frac{46}{50} \times 100\% = 92\%$$

4. Media evaluation sheet from judge 2

$$\text{Percentage} = \frac{\text{Actual Score}}{\text{SMI}} \times 100\% = \frac{45}{50} \times 100\% = 90\%$$



Appendix 8. Appendix 8. Reliability Testing of Questionnaire for Content and Media Evaluation

1) Content Expert Evaluation Questionnaire

Intraclass Correlation Coefficient							
	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.655 ^a	.309	.847	4.789	19	19	.001
Average Measures	.791 ^c	.472	.917	4.789	19	19	.001

2) Media Expert Evaluation Questionnaire

Intraclass Correlation Coefficient							
	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.640 ^a	.062	.897	4.556	9	9	.017
Average Measures	.780 ^c	.116	.945	4.556	9	9	.017

Appendix 9. Data of User Experience Questionnaire

Raw Data of UEQ

Input Time	Name	Add ress	Email	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
2024/12/07 10:54:20 AM	User 1	IDN	putribalis460@gmail.com	6	7	5	2	1	5	6	7	4	6	6	2	4	6	1	4	1	4	4	5	1	7	1	3	1	5
2024/12/07 10:56:36 AM	User 2	IDN	ningtianaratih28@gmail.com	7	6	2	1	1	6	7	6	2	2	6	1	6	7	6	6	2	2	2	6	2	7	3	2	2	6
2024/12/07 10:56:50 AM	User 3	IDN	sinta2852@gmail.com	7	6	1	1	2	6	6	5	1	2	6	1	7	7	6	7	1	1	1	6	1	7	2	1	1	7
2024/12/07 10:56:55 AM	User 4	IDN	ranintacandra@gmail.com	7	7	2	3	3	7	7	7	1	7	7	1	7	7	7	7	1	1	1	7	1	7	1	1	1	7
2024/12/07 10:57:19 AM	User 5	IDN	dewitandra2003@gmail.com	7	7	1	2	1	6	7	6	2	2	7	2	7	6	7	6	2	1	1	6	1	5	3	1	1	7

2024/12/07 10:57:31 AM	User 6	IDN	kepinedo@gmail.com	6	6	3	2	3	5	6	4	5	3	6	3	5	6	6	6	2	3	3	5	1	7	2	3	2	6
2024/12/07 10:57:46 AM	User 7	IDN	luhmerdani982@gmail.com	7	6	2	1	3	6	6	4	3	4	6	2	7	6	5	6	2	1	2	5	3	6	3	2	1	6
2024/12/07 10:57:47 AM	User 8	IDN	ronapratiwi30@gmail.com	7	6	2	1	3	6	6	5	4	4	6	2	6	6	3	6	2	2	3	6	2	6	2	2	2	6
2024/12/07 10:57:51 AM	User 9	IDN	ratihdewayu409@gmail.com	7	6	3	3	2	7	7	6	3	2	6	1	4	6	2	6	2	2	2	6	1	5	3	1	2	6
2024/12/07 10:510:29 AM	User 10	IDN	pradnyanaparadila1@gmail.com	5	6	2	1	1	5	6	6	2	4	6	2	6	6	5	6	3	2	2	6	2	6	2	2	2	6
2024/12/07 10:510:37 AM	User 11	IDN	tari.natya@gmail.com	7	6	1	2	1	5	7	7	2	3	4	1	7	6	6	7	1	4	2	7	3	7	3	1	2	7
2024/12/07 10:510:41 AM	User 12	IDN	ninaprawinandy@gmail.com	7	6	5	1	1	7	6	7	2	6	6	1	5	6	6	6	2	1	2	6	2	6	2	1	1	6

2024/12/07 10:59:09 AM	User 13	IDN	risarahayu70@gmail.com	1	1	7	7	1	7	7	1	7	1	7	7	7	1	7	1	1	1	7	1	7	1	1	1	1	5
2024/12/07 10:59:19 AM	User 14	IDN	anayacinta5@gmail.com	6	7	1	1	2	6	7	2	1	1	7	2	7	6	1	6	1	1	2	6	2	6	1	1	2	6
2024/12/07 10:59:22 AM	User 14	IDN	aliyasavira0@gmail.com	7	7	2	1	1	7	7	7	3	5	6	1	7	7	2	7	1	1	2	6	1	7	7	1	1	6
2024/12/07 10:59:25 AM	User 15	IDN	dewisarianii16@gmail.com	7	7	1	1	2	7	7	6	1	1	7	2	7	7	7	6	1	2	2	7	1	7	1	1	2	1
2024/12/07 10:59:31 AM	User 16	IDN	putuekamei2017@gmail.com	7	7	5	1	1	5	5	7	4	4	6	3	7	6	4	7	1	3	2	4	1	5	2	3	2	6
2024/12/07 10:59:310 AM	User 17	IDN	dwimayoga1212@gmail.com	7	4	7	1	3	6	5	7	4	2	6	1	7	5	7	6	2	1	2	7	1	6	3	1	1	7
2024/12/07 10:59:47 AM	User 18	IDN	dindapt3007@gmail.com	7	6	4	2	1	6	7	5	5	3	7	1	6	6	5	7	1	2	3	5	2	4	3	2	2	6
2024/12/07 10:59:47 AM	User 19	IDN	rapiyanti@gmail.com	7	7	2	1	1	7	7	7	2	3	7	2	6	7	6	7	2	1	2	7	2	6	3	2	1	6

2024/12/07 9:00:34 AM	User 20	IDN	mudayan_a@gmail.com	2	6	6	2	2	7	6	6	2	6	6	2	6	7	2	6	1	2	2	6	7	7	1	2	1	1
2024/12/07 9:00:43 AM	User 21	IDN	winarsa@gmail.com	5	6	1	1	1	7	5	6	2	6	7	2	6	6	6	6	2	2	1	6	1	6	2	3	1	6
2024/12/07 9:00:44 AM	User 22	IDN	vicap@gmail.com	1	1	3	5	2	1	2	6	4	7	1	4	5	2	1	2	5	4	6	1	7	2	5	3	4	5
2024/12/07 9:00:54 AM	User 23	IDN	meiarta@gmail.com	1	2	6	2	7	1	1	1	3	6	2	1	6	6	3	6	1	1	1	7	1	7	1	1	1	7
2024/12/07 9:01:410 AM	User 24	IDN	santini@gmail.com	7	5	1	2	1	7	7	7	1	5	7	1	7	6	7	7	1	1	2	7	1	7	6	1	1	1
2024/12/07 9:01:56 AM	User 25	MY	nshsabri@gmail.com	6	7	1	2	3	5	7	3	4	5	6	7	7	7	4	7	1	1	1	2	1	5	3	4	1	2
2024/12/07 9:03:19 AM	User 26	MY	Leeyanna82@gmail.com	2	2	7	6	6	1	4	7	4	7	5	5	7	4	4	7	7	1	7	5	7	6	7	6	5	3
2024/12/07 9:04:50 AM	User 27	MY	nurdiyanahmatdaud@gmail.com	1	7	1	1	1	7	7	7	4	4	2	3	5	3	5	3	3	3	4	4	3	6	3	2	1	2

2024/12/07 9:06:29 AM	User 28	MY	joanne@gmail.com	6	6	1	3	1	7	7	5	2	2	7	1	6	7	7	7	1	3	1	5	1	6	1	2	1	6
2024/12/07 9:09:21 AM	User 29	MY	sharala@gmail.com	5	4	5	4	7	6	5	7	6	5	7	6	5	7	5	4	6	7	6	6	2	7	2	4	3	5
2024/12/07 12:54:43	User 30	My	sharifahsalleh@gmail.com	7	7	7	1	1	7	7	6	1	1	7	1	7	7	7	7	1	1	1	7	1	7	1	1	1	7
TOTAL				172	174	97	64	66	178	187	173	91	119	182	71	192	182	150	182	60	62	79	170	69	184	80	61	50	163



Appendix 10. Result of UEQ

Item	Mean	Variance	Std. Dev.	No.	Left	Right	Scale	
1	1.5	4.9	2.2	31	annoying	enjoyable	Attractiveness	
2	1.6	3.2	1.8	31	not understandable	understandable	Perspiciuity	
3	0.9	4.8	2.2	31	creative	dull	Novelty	
4	1.9	2.4	1.5	31	easy to learn	difficult to learn	Perspiciuity	
5	1.9	2.9	1.7	31	valuable	inferior	Stimulation	
6	1.7	3.1	1.8	31	boring	exciting	Stimulation	
7	2.0	2.2	1.5	31	not interesting	interesting	Stimulation	
8	1.6	3.1	1.8	31	unpredictable	predictable	Dependability	
9	1.1	2.5	1.6	31	fast	slow	Efficiency	
10	0.2	3.8	2.0	31	inventive	conventional	Novelty	
11	1.9	2.4	1.6	31	obstructive	supportive	Dependability	
12	1.7	3.1	1.8	31	good	bad	Attractiveness	
13	2.2	0.9	0.9	31	complicated	easy	Perspiciuity	
14	1.9	2.2	1.5	31	unlikable	pleasing	Attractiveness	
15	0.8	4.1	2.0	31	usual	leading edge	Novelty	
16	1.9	2.3	1.5	31	unpleasant	pleasant	Attractiveness	
17	2.1	2.3	1.5	31	secure	not secure	Dependability	
18	2.0	1.9	1.4	31	motivating	demotivating	Stimulation	
19	1.5	3.1	1.7	31	meets expectations	does not meet expectations	Dependability	
20	1.5	2.7	1.6	31	inefficient	efficient	Efficiency	
21	1.8	3.9	2.0	31	clear	confusing	Perspiciuity	
22	1.9	2.1	1.4	31	impractical	practical	Efficiency	
23	1.4	2.8	1.7	31	organized	cluttered	Efficiency	
24	2.0	1.4	1.2	31	attractive	unattractive	Attractiveness	

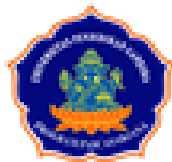
25	2.4	0.9	1.0	31	friendly	unfriendly	Attractiveness	
26	1.3	3.7	1.9	31	conservative	innovative	Novelty	

N0	Item	1	2	3	4	5	6	7	Scale
1	annoying/enjoyable	4	2	0	0	3	5	17	Attractiveness
2	not understandable/understandable	2	2	0	2	1	13	11	Perspicuity
3	dull/creative	4	2	4	1	3	7	10	Novelty
4	difficult to learn/easy to learn	1	1	1	1	3	9	15	Perspicuity
5	inferior/valuable	2	1	0	0	6	6	16	Stimulation
6	boring/exciting	3	0	0	0	6	9	13	Stimulation
7	not interesting/interesting	1	1	0	1	4	8	16	Stimulation
8	unpredictable/predictable	2	1	1	2	4	9	12	Dependability
9	slow/fast	1	1	2	8	4	9	6	Efficiency
10	conventional/inventive	3	5	4	5	4	6	4	Novelty
11	obstructive/supportive	1	2	0	1	1	14	12	Dependability
12	bad/good	2	1	1	1	3	10	13	Attractiveness
13	complicated/easy	0	0	0	2	5	9	15	Perspicuity
14	unlikable/pleasing	1	1	1	1	1	15	11	Attractiveness
15	usual/leading edge	3	3	2	3	5	7	8	Novelty
16	unpleasant/pleasant	1	1	1	2	0	14	12	Attractiveness
17	not secure/secure	1	1	1	0	2	10	16	Dependability
18	demotivating/motivating	1	0	0	3	4	8	15	Stimulation
19	does not meet expectations/meets expectations	2	2	0	2	3	14	8	Dependability
20	inefficient/efficient	2	1	0	2	6	12	8	Efficiency
21	confusing/clear	4	0	0	0	3	8	16	Perspicuity
22	impractical/practical	1	1	0	1	4	11	13	Efficiency
23	cluttered/organized	2	1	1	0	10	8	9	Efficiency
24	unattractive/attractive	0	1	0	2	5	9	14	Attractiveness

25	unfriendly/friendly	0	0	1	1	1	10	18	Attractiveness
26	conservative/innovative	3	2	1	0	4	14	7	Novelty



Appendix 11. Surat Pengantar Penilai Ahli



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
PROGRAM PASCASARJANA

Jalan Udayana Nomor 11, Singaraja, Bali 81116 Telpun 081999446444 Laman www.unpganesha.ac.id

Nomor : 579 /UN48.14.13/KM/2025
Lamp : 1 (satu) gabung
Perihal : **Pengantar Judges (Ahli Media)**

Kepada

Yth. : 1. Prof. Dr. Ketut Agustini, S.Si., M.Si
2. Dr. I Gede Partha Sindu, S.Pd., M.Pd

Di - Tempat

Dengan hormat, berkenan dengan persiapan penyusunan Disertasi mahasiswa Program Studi **Pendidikan Bahasa Inggris (S3)** Program Pascasarjana Undiksha Singaraja, dimohon kesediaan Bapak/Ibu untuk dapat memeriksa instrument (sebagai Judges) penelitian mahasiswa berikut:

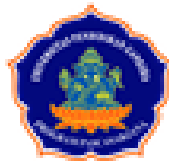
Nama : Kadek Sintya Dewi
NIM : 223941005
Program Studi : Pendidikan Bahasa Inggris (S3)
Judul Disertasi : Developing Digital Interactive Media to Teach Basic Literacy and Communication in English as a Foreign Language to Young Learners with Autism Spectrum Disorder (ASD)

Demikianlah kami sampaikan atas perhatian dan kerjasamanya kami sampaikan terimakasih.

Singaraja, 18 Oktober 2024

Koordinator Program Studi
Pendidikan Bahasa Inggris (S3),

Prof. Dr. Ni Nyoman Padmadewi, M.A
NIP 196202021988032001



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
PROGRAM PASCASARJANA

Jalan Udayana Nomor 11 Singaraja, Bali 81116 Telpom 081986446444 Laman www.unpganesha.ac.id

Nomor : 580 /UN48.14.13/KM/2025
Lamp : 1 (satu) gabung
Perihal : Pengantar Judges (Ahli Isi dan Bahasa Inggris)

Kepada

Yth. : 1. Associate Prof. Thilagavathi Shanmuganathan, Ph.D
2. Dr. Sharala Subramaniam

Di - Tempat

Dengan hormat, berkenan dengan perlapan penyusunan Disertasi mahasiswa Program Studi Pendidikan Bahasa Inggris (S3) Program Pascasarjana Undiksha Singaraja, dimohon kesediaan Bapak/Ibu untuk dapat memeriksa instrument (sebagai Judges) penelitian mahasiswa berikut:

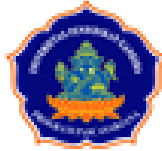
Nama : Kadek Sintya Dewi
NIM : 223941005
Program Studi : Pendidikan Bahasa Inggris (S3)
Judul Disertasi : Developing Digital Interactive Media to Teach Basic Literacy and Communication in English as a Foreign Language to Young Learners with Autism Spectrum Disorder (ASD)

Demikianlah kami sampaikan atas perhatian dan kerjasamanya kami sampaikan terimakasih.

Singaraja, 18 Oktober 2024

Koordinator Program Studi
Pendidikan Bahasa Inggris (S3),

Prof. Dr. Ni Nyoman Padmadewi, M.A.
NIP 196202021968032001



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
PROGRAM PASCASARJANA

Jalan Udayana Nomor 11 Singaraja, Bali 81116 Telepon 081988446444 Laman www.pascaundiksha.ac.id

Nomor : 580 /UN48.14.13/KM/2024
Lamp : 1 (satu) *gabung*
Perihal : Pengantar Judges (Ahli IEPs dan Materi Bahasa Inggris untuk Siswa dengan ASD)

Kepada

Yth. : 1. Dr. Sunitha Sivaikumaran
2. Sharifah bt Salleh

Di - Tempat

Dengan hormat, berkenan dengan persiapan penyusunan Disertasi mahasiswa Program Studi **Pendidikan Bahasa Inggris (S3)** Program Pascasarjana Undiksha Singaraja, dimohon kesediaan Bapak/Ibu untuk dapat memeriksa instrument (sebagai Judges) penelitian mahasiswa berikut:

Nama : Kadek Sintya Dewi
NIM : 223941005
Program Studi : Pendidikan Bahasa Inggris (S3)
Judul Disertasi : Developing Digital Interactive Media to Teach Basic Literacy and Communication in English as a Foreign Language to Young Learners with Autism Spectrum Disorder (ASD)

Demikianlah kami sampaikan atas perhatian dan kerjasamanya kami sampaikan terimakasih.

Singaraja, 18 Mei 2024

Koordinator Program Studi
Pendidikan Bahasa Inggris (S3),

Prof. Dr. Ni Nyoman Padmadewi, M.A.
NIP 196202021968032001

Appendix 12. Surat Ijin Pengambilan Data



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
PROGRAM PASCASARJANA

Jalan Udayana Nomor 11 Singaraja, Bali 81116 Telepon 081999446444 Laman www.unpganesha.ac.id

Singaraja, 15 Mei 2024

Nomor : 580 /UN48.14.13/KM/2024
Hal : Mohon Ijin Pengambilan Data
Yth : Kepala Sekolah NBBS

Di - Tempat

Dengan hormat, dalam rangka pengumpulan data untuk Penelitian Disertasi mahasiswa Program Pascasarjana Universitas Pendidikan Ganesha, kami mohon kesediaan Bapak/Ibu untuk dapat menerima dan mengijinkan mahasiswa kami sebagai berikut:

Nama : Kadek Sintya Dewi
NIM : 223941005
Semester : 4 (Empat)
Program Studi : Pendidikan Bahasa Inggris (S3)
Judul Disertasi : Developing Digital Interactive Media to Teach Basic Literacy and Communication in English as a Foreign Language to Young Learners with Autism Spectrum Disorder (ASD)

Untuk mendapatkan data dan informasi yang dibutuhkan oleh mahasiswa dalam melakukan penelitian. Atas perhatian, berkenaan dan kerjasama yang baik kami ucapkan terimakasih.

Menyetujui,

Promotor

Prof. Dr. Ni Nyoman
Padmadewi, M. A.

Co-Promotor I

Prof. Dra. L. P. Artini,
M.A., Ph.D.

Co-Promotor II

Prof. Dr. N. L. P. Sri
Adnyani, S.Pd., M.Hum.

Mengetahui,
Koordinator Program Studi
Pendidikan Bahasa Inggris (S3),

Prof. Dr. Ni Nyoman Padmadewi, M.A.
NIP 196202021988032001



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
PROGRAM PASCASARJANA

Jalan Udayana Nomor 11 Singaraja, Bali 81116 Telepon 081999446444 Laman www.pasca.unp@kgsa.ac.id

Singaraja, 15 Mei 2024

Nomor : 580 /UN48.14.13/KM/2024
Hal : Mohon Ijin Pengambilan Data
Yth : Kepala Sekolah Taarana (Pusat Pendidikan Khas Sinaran)

Di - Tempat

Dengan hormat, dalam rangka pengumpulan data untuk Penelitian Disertasi mahasiswa Program Pascasarjana Universitas Pendidikan Ganesha, kami mohon kesediaan Bapak/Ibu untuk dapat menerima dan mengijinkan mahasiswa kami sebagai berikut:

Nama : Kadek Sintya Dewi
NIM : 223941005
Semester : 4 (Empat)
Program Studi : Pendidikan Bahasa Inggris (S3)
Judul Disertasi : Developing Digital Interactive Media to Teach Basic Literacy and Communication in English as a Foreign Language to Young Learners with Autism Spectrum Disorder (ASD)

Untuk mendapatkan data dan informasi yang dibutuhkan oleh mahasiswa dalam melakukan penelitian. Atas perhatian, berkenaan dan kerjasama yang baik kami ucapkan terimakasih.

Menyetujui,

Promotor

Co-Promotor I

Co-Promotor II

Prof. Dr. Ni Nyoman
Padmadewi, M. A.

Prof. Dra. L. P. Artini,
M.A., Ph.D.

Prof. Dr. N. L. P. Sri
Adnyani, S.Pd., M.Hum.

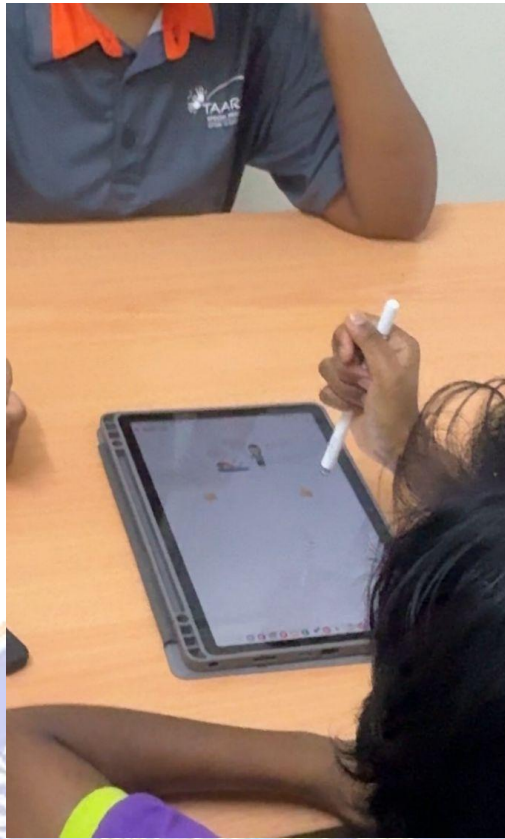
Mengetahui,
Koordinator Program Studi
Pendidikan Bahasa Inggris (S3),

Prof. Dr. Ni Nyoman Padmadewi, M.A
NIP 196202021988032001

Appendix 13. Dokumentasi Proses Pengumpulan Data

Taarana School, Malaysia.

1st Week



2nd Week



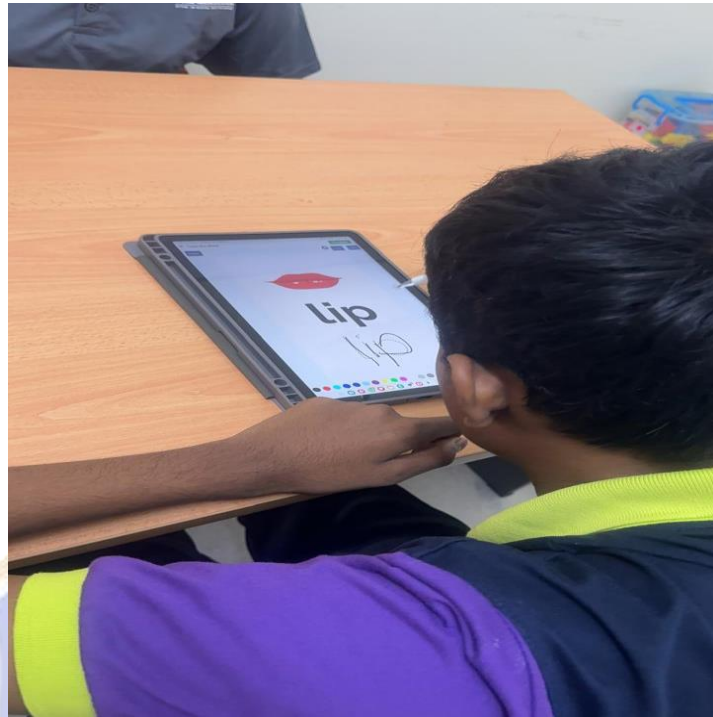
3rd Week



4th Week



5th Week

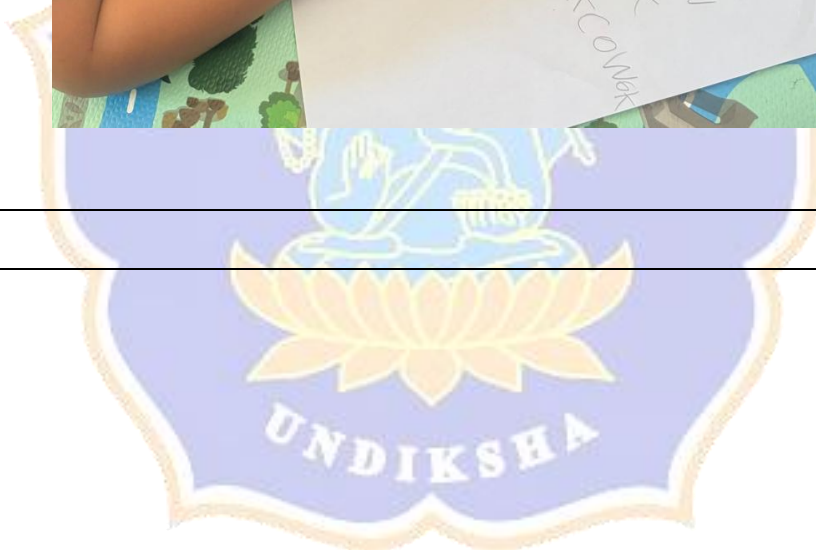


An Inclusive Elementary in North Bali, Indonesia.

1st Week



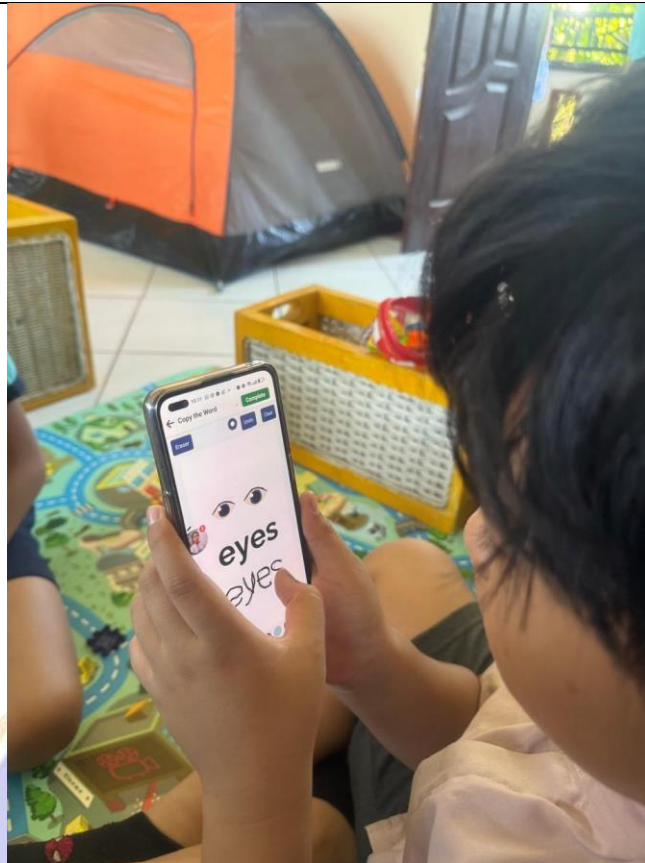
2nd Week





3rd Week

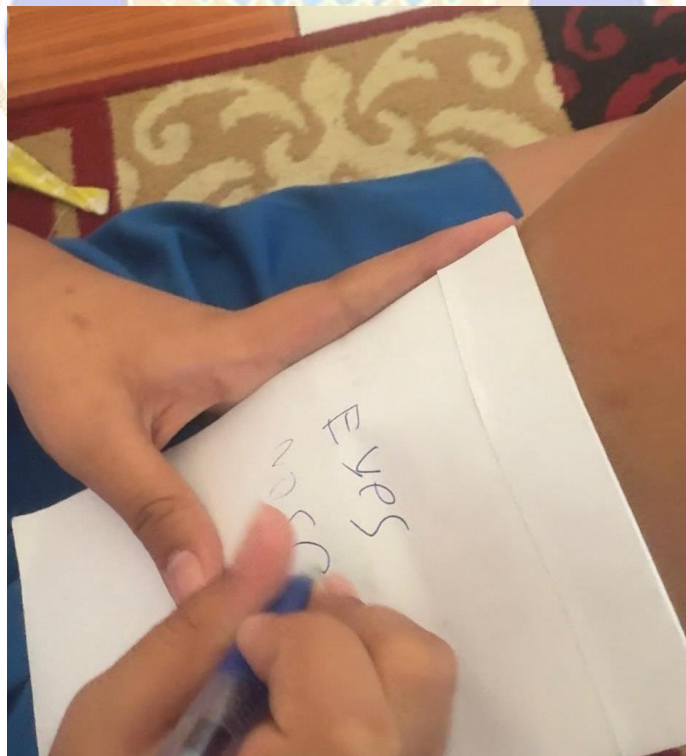




4th Week



5th Week



Appendix 14. Surat Ijin Mengambil Data



KEMENTERIAN PENDIDIKAN TINGGI, SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
PROGRAM PASCASARJANA

Jalan Udayana Nomor 11 Singaraja, Bali 81136 Telp: 081999446444 Email: info@unpg.ac.id

Singaraja, 3 Juni 2025

Nomor : 2497/UN48.14.1/PT.02.05/2025
Hal : **Mohon Ijin Pengambilan Data**
Yth. : Kepala Sekolah NBBS

di Tempat

Dengan hormat, dalam rangka pengumpulan data untuk Penelitian Disertasi mahasiswa Program Pascasarjana Universitas Pendidikan Ganesha, kami mohon kesediaan Bapak/Ibu untuk dapat menerima dan mengizinkan mahasiswa kami sebagai berikut :

Nama	: Kadek Sintya Dewi
NIM	: 223941005
Program Studi	: Pendidikan Bahasa Inggris (S3)
Judul Disertasi	: Developing Digital Interactive Media to Teach Basic Literacy and Communication in English as a Foreign Language to Young Learners with Autism Spectrum Disorder (ASD).

untuk mendapatkan data/informasi yang dibutuhkan oleh mahasiswa dalam melakukan penelitian.

Atas perhatian, berkenaan dan kerja sama yang baik kami ucapkan terima kasih.

Menyetujui,

Promotor ,

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Appendix 15. Students Progress Report in Baseline and Intervention Phase

(a) Indonesian Students 1 (Code + Initial: IS1CA)

- **Name:** CA
- **Age:** 8 years old
- **Gender:** Male
- **Academic Level:** Academic 1
- **Intermediate level** (picture-words)
- **Diagnoses:** Autism, ADHD
- **Characteristics:** Lack of focus, over cheerful, reward addicted, playful, cheerful, disciplined and very active.

Favourite Activities: Drawing, Playing Games

First week intervention progress report (IS1CA)							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p>		+	√	

			Students are able to play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greeting to others.			√	

The table above shows how students (IS1CA) progress in learning basic English literacy and communication involving reading, writing, and speaking in intervention phase. The different patterns show students changing conditions from only being able to read but needs to be stimulated once by the teacher, to being able to do all of the instructions himself in writing activity and went back again to the condition of needs to be stimulated several times by the teacher in speaking activity.

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+		
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing	+ +			

			every word correctly.				
3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to asking and telling their hobbies.			√	

The table above shows how students (IS1CA) progress in learning basic English literacy and communication involving reading, writing, and speaking in intervention phase. The different patterns show students changing conditions from only being able to read but needs to be stimulated once by the teacher, to being able to do all of the instructions himself in writing activity and went back again to the condition of needs to be stimulated several times by the teacher in speaking activity.

Third week intervention progress report (IS1CA)							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Family	My Family	Students are able to read the words and simple sentences in the quiz		+		

			with audio assistance.				
			Students are able to match the words and the correct picture without audio assistance.		+		
			Students are able to play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Family	My Family	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.		+		

The table above shows how students (IS1CA) progress in learning basic English literacy and communication involving reading, writing, and speaking in intervention

phase. The different patterns show students changing conditions from only being able to read but needs to be stimulated once by the teacher, to being able to do all of the instructions himself in writing activity and went back to the condition of needs to be stimulated once by the teacher in speaking activity. Here, the improvement of speaking happened from the condition of needs to be stimulated several times by the teacher becoming only needs to be stimulated once by the teacher in speaking activity.

Fourth week intervention progress report (IS1CA)							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the</p>		+		

			quiz in the digital media				
					+		
2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.		+		

The table above shows how students (IS1CA) progress in learning basic English literacy and communication involving reading, writing, and speaking in intervention phase. The different patterns show students changing conditions from only being able to read but needs to be stimulated once by the teacher, to being able to do all of the instructions himself in writing activity and went back to the condition of needs to be stimulated once by the teacher in speaking activity. Here, the improvement of speaking happened from the condition of

needs to be stimulated several times by the teacher becoming only needs to be stimulated once by the teacher in speaking activity.

Fifth week intervention progress report (IS1CA)							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My House	My House	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+		

					+		
2	Writing English Vocabulary about My House	My House	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about My House.		Students are able to asking and telling their house and its parts.			√	

The table above shows how students (IS1CA) progress in learning basic English literacy and communication involving reading, writing, and speaking in intervention phase. The different patterns show students changing conditions from only being able to read but needs to be stimulated once by the teacher, to being able to do all of the instructions himself in writing activity and went back to the condition of needs to be stimulated several times by the teacher in speaking activity. Here, the condition of IS1CA was not good. It could affect his focus and performance during speaking activity.

(b) Indonesian Students 2 (Code + Initial: IS2SN)

- **Name:** SN
- **Age:** 10th
- **Gender:** Male

- **Academic Level:** 5th level of academic special Programme (Advance: Picture-Sentence)
- **Diagnosis:** Autism
- **Characteristics:** Lack of focus but getting better gradually, can read sentences, lack of social interaction
- **Favourite Activities:**
 Drawing: Lift (at the moment so obsessed about lift)
 Non-digital playing: Lego (making the shape of Lift)
 Digital game playing: Roblox games (at home)

The first week intervention progress report (IS2SN).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to</p>	<p>++</p> <p>++</p>			

			play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greeting to others.		+		

Second week intervention progress report (IS2SN).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)

1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	++			
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression	My hobby	Students are able to asking and telling their hobbies.		+		

	of asking and telling about hobbies.						
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Third week intervention progress report (IS2SN).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Family	My Family	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>++</p> <p>++</p>			

					+		
2	Writing English Vocabulary about My Family	My Family	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.		+		

Fourth week intervention progress report (IS2SN).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	Students are able to read the words and simple sentences in the quiz with audio assistance.	++			

			<p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	++	+		
2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.		+		

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My House	My House	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	++			
2	Writing English Vocabulary	My House	Students are able to do the	++			

	about My House		digital exercise by tracing every word correctly.				
3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.		+		

(c)Indonesian Students 3 (Code + Initial: IS3DVN)

- **Name:** DVN
- **Age:** 10 years old
- **Gender:** Male
- **Academic Level:** 5th level of academic special Programme (Advance: Picture-Sentence)
- **Diagnosis:** Autism
- **Characteristics:** easily melting down, hearing sensitivity, lack of focus.
Can read sentences, can count, speaking English fluently.
- **Favourite Activities:** watching YouTube, and playing golf with non-digital toys.

First week intervention progress report (IS3DVN).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable

				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	<p>++</p> <p>++</p> <p>+</p>			
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of greeting and telling	My Body	Students are able to respond or tell their body condition and give		+		

	about body condition.		greeting to others.				
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Second week intervention progress report (IS3DVN).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	++			

					+		
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to asking and telling their hobbies.		+		

Third week intervention progress report (IS3DVN).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Family	My Family	Students are able to read the words and simple sentences in the quiz with audio assistance. Students are able to	++			

			match the words and the correct picture without audio assistance.	++			
			Students are able to play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Family	My Family	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.		+		

Fourth week intervention progress report (IS3DVN).

No	Learning Objectives	Topics	Indicators	Willing to do the	Able to do the instruction with one	Able to do the instruction but needs	Non-observable
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				instruction by himself	stimulation by the teacher	to be stimulated several times by the teacher	
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>	++			
2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.	++			

3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.		+		
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Fifth week intervention progress report (IS3DVN).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My House	My House	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to</p>	++			

			play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My House	My House	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.		+		

(d) Malaysian Students 1 (Code + Initial: MS1JVT)

- **Name:** JVT
- **Age:** 8 years old
- **Gender:** Female (an orphan girl)
- **Academic Level:** Academic 1 Beginner)
- Beginner level (pre K of reading, 1st grade
- **Diagnoses:** Intellectual Disability, Autism ADHD
- **Characteristics:** Lack of focus, sometimes has good focus, attention seeker.
- **Favourite Activities:** Willing to do any kind of activities

First week intervention progress report (MS1JVT).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation	Able to do the instruction but needs to be	Non-observable
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					by the teacher	stimulated several times by the teacher	
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>			√	
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.	+ +			

3	Speaking English Vocabulary and simple expression of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greeting to others.			√	
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Second week intervention progress report (MS1JVT).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to</p>		+	√	

			play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to asking and telling their hobbies.			√	

Third week intervention progress report (MS1JVT).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Family	My Family	Students are able to read the words and simple sentences in the quiz			√	

			<p>with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+		
2	Writing English Vocabulary about My Family	My Family	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.			√	

Fourth week intervention progress report (MS1JVT).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>			√	
2	Writing English Vocabulary about My	My Daily Activities	Students are able to do the digital exercise by tracing	+ +			

	Daily Activities		every word correctly.				
3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.			√	

Fifth week intervention progress report (MS1JVT).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My House	My House	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p>		+	√	

			Students are able to play and finish the quiz in the digital media				
2	Writing English Vocabulary about My House	My House	Students are able to do the digital exercise by tracing every word correctly.	++			
3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.			√	

(e) Malaysian Students 2 (Code + Initial: MS2SML)

- **Name:** SML
- **Age:** 7 years old
- **Gender:** Male
- **Academic Level:** Early Transition Programme
- **Diagnoses:** Autism
- **Characteristics:** Lack of Focus, Learning/starting to talk.
- **Favourite Activities:** Take and drop, working on tablet activities, don't like worksheet.

First week intervention progress report (MS2SML).							
No	Learning Objectives	Topics	Indicators	Willing to do the	Able to do the instruction	Able to do the instruction	Non-observable

				instruction by himself	with one stimulation by the teacher	but needs to be stimulated several times by the teacher	
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+	√	
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing		+		

			every word correctly.				
3	Speaking English Vocabulary and simple expression of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greeting to others.			√	

Second week intervention progress report (MS2SML).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p>		+	√	

			Students are able to play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing every word correctly.		+		
3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to ask and tell their hobbies.			√	

Third week intervention progress report (MS2SML).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple	My Family	Students are able to read the words and			√	

	<p>sentence about My Family</p>		<p>simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+		
2	<p>Writing English Vocabulary about My Family</p>	My Family	<p>Students are able to do the digital exercise by tracing every word correctly.</p>		+		
3	<p>Speaking English Vocabulary and simple expression of asking and telling about Family Members.</p>	My Family	<p>Students are able to asking and telling their Family Members.</p>			√	

Fourth week intervention progress report (MS2SML).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+	√	

2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.		+		
3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to ask and telling their Daily Activities.			√	

Fifth week intervention progress report (MS2SML).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My House	My House	Students are able to read the words and simple sentences in the quiz with audio assistance. Students are able to match the			√	

			words and the correct picture without audio assistance.		+		
			Students are able to play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My House	My House	Students are able to do the digital exercise by tracing every word correctly.		+		
3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.			√	

(f) Malaysian Students 3 (Code + Initial: MS3LKM)

- **Name:** LKM
- **Age:** 15 years old
- **Gender:** Male

- **Academic Level:** Prevocational
- **Diagnose:** Autism
- **Characteristics:** Focus problem, Sensory tactile, articulation problem.
He is taking vocational program but cannot read yet
- **Favourite Activities:** Willing to do any kind of activities

First week intervention progress report (MS3LKM).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Body	My Body	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the</p>		+	√	

			digital media		+		
2	Writing English Vocabulary about My Body	My Body	Students are able to do the digital exercise by tracing every word correctly.		+		
3	Speaking English Vocabulary and simple expressions of greeting and telling about body condition.	My Body	Students are able to respond or tell their body condition and give greetings to others.			√	

Second week intervention progress report (MS3LKM).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Hobby	My Hobby	Students are able to read the words and simple sentences in the quiz with audio assistance.			√	

			<p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+		
2	Writing English Vocabulary about My Hobby	My Hobby	Students are able to do the digital exercise by tracing every word correctly.		+		
3	Speaking English Vocabulary and simple expression of asking and telling about hobbies.	My hobby	Students are able to asking and telling their hobbies.			√	

Third week intervention progress report (MS3LKM).							
No		Topics	Indicators	Willing to do the	Able to do the	Able to do the	Non-observable

	Learning Objectives			instruction by himself	instruction with one stimulation by the teacher	instruction but needs to be stimulated several times by the teacher	
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Family	My Family	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>		+	√	
2	Writing English Vocabulary about My Family	My Family	Students are able to do the digital exercise by tracing		+		

			every word correctly.				
3	Speaking English Vocabulary and simple expression of asking and telling about Family Members.	My Family	Students are able to asking and telling their Family Members.			√	

Fourth week intervention progress report (MS3LKM).							
No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation by the teacher	Able to do the instruction but needs to be stimulated several times by the teacher	Non-observable
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My Daily Activities	My Daily Activities	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p>			√	

			Students are able to play and finish the quiz in the digital media		+		
2	Writing English Vocabulary about My Daily Activities	My Daily Activities	Students are able to do the digital exercise by tracing every word correctly.		+		
3	Speaking English Vocabulary and simple expression of asking and telling about Daily Activities.	My Daily Activities	Students are able to asking and telling their Daily Activities.			√	

Fifth week intervention progress report (MS3LKM).

No	Learning Objectives	Topics	Indicators	Willing to do the instruction by himself	Able to do the instruction with one stimulation	Able to do the instruction but needs to be	Non-observable
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					by the teacher	stimulated several times by the teacher	
				(+ +)	(+)	(√)	(-)
1	Reading English Vocabulary and simple sentence about My House	My House	<p>Students are able to read the words and simple sentences in the quiz with audio assistance.</p> <p>Students are able to match the words and the correct picture without audio assistance.</p> <p>Students are able to play and finish the quiz in the digital media</p>			√	
2	Writing English Vocabulary about My House	My House	Students are able to do the digital exercise by tracing every word correctly.		+		

3	Speaking English Vocabulary and simple expression of asking and telling about My House.	My House	Students are able to asking and telling their house and its parts.			√	
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