Unit 2

Intentionally left blank.

General Accomodation by Ability Level

Schedules:

- Schedules are a guide.
- Time for tasks and breaks should be individualized based on attention span and behavioral needs.
- Observational data should be collected to document these needs.

Pre-Teaching

Group 1

- Students with little or no formal communication systems, low tech AAC, sight word or non-readers will need 1:1 or 1:2 instruction
- Manipulatives
- Direct Modeling by the teacher
- Hand-under-hand to instruct, and hand-over-hand to model responses.
- Systematic Prompting
  - Least prompts, Most to Least, Guided Practice (independent; verbal cue; model; physical prompt, if tolerated)
  - Select the individualized prompts and record student response data
- Lessons broken into smaller segments
- Repeated practice

Group 2

- Students who use AAC and/or other visuals for comprehension and have some sight words or pre-K reading levels may need small group instruction
- Lessons broken into smaller segments
- Small group instruction
- Direct modeling by the teacher
- Repeated Practice

Group 3

- Students who have a grade 2 reading level or higher, formal communication systems (verbal or AAC) may need content to be broken down into smaller segments
  - Select content reading level grade 2 or grade 4 for each student
  - Video Modeling or Direct Modeling by the teacher
  - Visuals and manipulatives for improved comprehension
  - Probe length of time on task and needs for breaks and adjust instructional times (record if different from times in the suggested schedules)

Design and Reflection Journals

Group 1

- For student with little or no formal communication system:
  - Model and prompt the response
  - May need to only answer like/dislike the task using individualized communication (point to symbol; answer a question with a yes/no response)
  - Have the instructor record the response in the student's journal

Group 2

- Students who use AAC and/or other visuals for comprehension and have some sight words or pre-K reading levels may need small group or individual instruction
  - Model expectations and repeat the task for those who did not complete the task
  - Responses may be written, oral with a scribe writing the response in the journal, or may draw a picture.

Group 3

- Students with a grade 2 reading level or higher
  - May need repeated instruction for the first few lessons

Notes:

UNIT 2
SESSION 1

Performing Scripts

Session Schedule

Pre-teaching (10 minutes)

⬇

Activity Part 1 (5 min)

⬇

Break (2 min - As needed)

⬇

Activity Part 2 (15 min)

⬇

Break (2 min - As needed)

⬇

Activity Part 3 (15 min)

Pre-Teaching Topics & Terms

Topics:

Explain events and parallelism to students and demonstrate them how they work in general and how they function in Scratch.

Terms:

Terms	Description and Symbol
Sequence	What comes next in a certain way.
Parallelism	Two things that happen at the same time.
Event	When one thing makes a different thing start.
Script	What you look at and act out.
Reset	To go back to the beginning.

Expectations:

Tell students that they will be asked to explain what events and parallelism are as well as how they function in Scratch.

Session Objectives

The purpose of this session is to introduce students to the concepts of events (one thing causing another thing to happen) and parallelism (multiple things happening at the same time).

Learning Objectives

By the end of this session, students will be able to:

1. Explain events in terms of what they are and how they work in Scratch.
2. Explain parallelisms in terms of what they are and how they work in Scratch.

Resources:

¤ Projector

ACTIVITY DESCRIPTION

Activity Part 1

¤ Have a projector connected to a computer with Scratch open to display which blocks and scripts will be performed.
¤ Ask two volunteers from students with a grade 2 reading level or higher.

Activity Part 2

Prompts the two volunteer students with a 2nd grade level in reading or higher (students names) to act out a series of instructions.
1. Have one student volunteer walk across the room
2. Have that student "reset"
3. Have that student walk across the room and talk simultaneously
4. Add the second student volunteer (students name), by having the second student simultaneously (but independently) walk across the room
5. Have the second student do a dependent task, like responding to the first student

Activity Part 3

¤ Ask students with pre-K reading level or higher (student names) to reflect on the experience to discuss the concepts of events and parallelism using reflection prompts in their design journal in written or drawing format and ask students (student names) to discuss with their peers (student names) or USATs (student names). Discussions include AAC, showing the drawings. For students who cannot engage in discussions or choose not to do so, ask if they like/don't like the project. **The USAT should note student names and responses.**

Notes to the Teacher

- Give frequent breaks for students with short attention spans or behavioral needs.
- Extended time for students as specified in the IEP.
- For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance.
- Use common and familiar words in your verbal instructions for students having difficulty communicating.

Notes by the Teacher:

Build A Band

Session Schedule

Pre-teaching (10 minutes)

⬇

Activity Part 1 (10 min)

⬇

Break (2 min or as needed)

⬇

Activity Part 2 (20 min)

⬇

Break (2 min)

⬇

Activity Part 3 (10 min)

Pre-Teaching Topics & Terms

Topics:

Show students how to create a Scratch project with one sprite which plays a sound when an event occurs on the sprite.

Terms:

Terms	Description and Symbol
Band	A group that makes music.
Music Extension	The place on scratch where music blocks are.
Sound tab	The place on scratch where you find sounds to use.
Sound	What you hear.
Costum Interactive Sprite	A sprite you can make move, make sounds with or click on.

Expectations:

Explain to the students that they will be creating a Scratch project with at least one sprite containing at least one sound, which plays when an event attached to the sprite occurs.

Session Objectives

The purpose of this session is to teach students how to create a program that combines interactive sprites with interesting sounds.

Learning Objectives

By the end of this session, students will be able to:

1. Create a Scratch project consisting of at least one sprite that plays a sound upon an event attached to the sprite

Resources:

¤ Projector
¤ Build-a-Band studio instructional video
¤ Build-a-Band demo instructional video.

ACTIVITY DESCRIPTION

Activity Part 1

¤ Show example projects from the Build-a-Band studio to students. For students who have little or no formal communication systems use one-to one instruction. For students who need prompting to stay on task use 1:2 instruction **(Document student names and level of needed supports).**
¤ Let all watch the Build-a-Band studio instructional video using the accommodations in the first step. **(Document student names and level of needed support)**
¤ Have students with a pre-k reading level and higher (student names) follow the Build-a-Band handout
¤ For students with little or no formal communication and for students who are struggling with the handout, demonstrate the steps, paired with each step of the handout as students model each step.
¤ Record the prompting level needed as specified on the rubric.

Activity Part 2

¤ Give students with a pre-K reading level or higher time to create interactive instruments by pairing sprites with sounds.
¤ Ask USATs to work with students(student names) who are struggling in a small group setting to create interactive instruments by pairing sprites with sounds
¤ Create a demo interactive instrument on the projector for students who continue to struggle with the above step or who have little or no formal communication system in a 1:1 or small group setting. Have them model each step (student names and level of support).
¤ Ask students engage with videos (student names) watch the Build-a-Band demo instructional video
¤ For students with little or no formal communication and for students who are struggling with the handout, demonstrate the steps, paired with each step of the handout as students model each step.
¤ Record the prompting level needed as specified on the rubric.
¤ Encourage students with experiment with different ways to express sounds in Scratch by exploring other blocks in the Music (extension) category or using the editing tools within the Sounds tab.

Activity Part 3

¤ Allow students with a pre-k reading level or higher (student names) to demonstrate their bands to one another and/or USATs, or ask students with all students to share with the class on the projector. **(individualize based on data from previous lessons and document).**

¤ Ask students to use the reflection prompts as they explain their bands

¤ Ask students (Student names) to think back on the design process by responding to the reflection prompts in their design journals in written, drawn, and/or symbol format.

¤ Reflections include AAC, showing the drawings.

¤ For students who cannot engage in discussions or choose not to do so, ask if they like/don't like the project. **The USAT should note student names and responses.**

Reviewing Student Work

¤ Were students able to open Scratch and find the Tips Window?

¤ Were students able to create a dancing cat project consisting of at least two Scratch blocks snapped together?

¤ Were students able to save and share projects?

Notes to the Teacher

¤ Create a studio for the class to collect student work. Start a class Studio for each session or unit using your Scratch account. For students who struggle or do not participate give the students (student names) the link to add their projects for the session or unit. Ask USATs to help students who struggle or have little or no formal communications systems(student names) to go to the class studio for the sessions or units.

¤ Give frequent breaks for students with short attention spans or behavioral needs.

¤ Extended time for students as specified in the IEP.

¤ For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance .

¤ Use common and familiar words in your verbal instructions for students having difficulty communicating.

Notes by the Teacher:

UNIT 2
SESSION 3

Orange Square, Purple Circle

Session Schedule

Pre-teaching (10 minutes)

↓

Activity Part 1 (15 min)

↓

Break (2 min)

↓

Activity Part 2 (20 min)

↓

Break (2 min)

↓

Activity Part 3 (10 min)

Pre-Teaching Topics & Terms

Topics:

Show students how to use the Paint editor to create different shapes and how to add them to a Scratch project. Show them one or more examples from the "Orange Square, Purple Circle" studio.

Terms:

Terms	Description and Symbol
Looks Blocks	What you use to make your sprite look different.
Paint Editor	What you use to change your sprites on scratch.
Orange Square	One of the sprites you use that is orange.
Purple Circle	One of the sprites you use that is purple.

Expectations:

Tell students that they are expected to create a simple project involving an orange square and a purple circle object.

Session Objectives

The purpose of this session is to teach students how to create an arts-themed simple Scratch project and to improve students' fluency with Looks blocks and the paint editor.

Learning Objectives

By the end of this session, students will be able to:

1. Create a simple Scratch project that has an orange square and a purple circle object.

Resources:

¤   Orange Square, Purple Circle handout
¤   Orange Square, Purple Circle studio at https://scratch.mit.edu/studios/475527/
¤   Orange Square, Purple Circle Handout instructional video
¤   Orange Square, Purple Circle instructional video

ACTIVITY DESCRIPTION

Activity Part I

¤   Show students with visual, auditory, and multi-sensory learning channel preference one or more example projects from the Orange Square, Purple Circle studio
¤   Ask students with visual, auditory, and multi-sensory learning channel preference to watch the "Orange Square, Purple Circle Studio" instructional video
¤   Ask students with visual, auditory, and multi-sensory learning channel preference to watch the "Orange Square, Purple Circle" instructional video
¤   Have the "Orange Square, Purple Circle" handout available to guide students with visual learning channel preference
¤   For students who are struggling have the USATs use guided practice procedure
¤   For students who have little or no formal communication system, use 1:1 instruction with systematic prompting.

Activity Part 2

¤   Give students time to create a project that includes an orange square and a purple circle.
¤   Invite students to experiment with Looks blocks and the paint editor to explore their artistic abilities
¤   Ask USATs to help students who prefer to work in groups

Activity Part 3

¤   Utilizing the reflection prompts, encourage students who prefer working in groups to share their creative work with their peers and/or USATs.
¤   Have students add their projects to a class studio
¤   Ask students who prefer working alone to reflect on their design process using the reflection prompts in their design journals in written, pictorial and/or symbol format.
¤   For students who do not have a formal communication system and could complete Activities 1 & 2, ask if they like the activity as listed in general accommodations section.
¤   **Document each students' responses.**

Notes to the Teacher

- Move students who seem agitated, uncooperative, being destructive, and/or showing repetitive, idiosyncratic speech patterns, and/or inappropriate behavior to an individual workstation, a calming, or quiet area.
- Move students showing anxiety to a familiar environment to reduce their anxiety levels
- Facilitate ways to calm students down
- Pair students who does not initiate interaction but will accept initiations from others with students who prefer studying in groups
- Use common and familiar words in your verbal instructions for students having difficulty communication
- Do not enforce a time limit for students who are having difficulty comprehending instructions and/or completing tasks
- For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance.
- Collect duration data on the students who require frequent breaks.
- Collect duration data for students who need extended time to complete the tasks.
- For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance (Student names here).
- Use common and familiar words in your verbal instructions for students having difficulty communicating providing symbols or other visuals as needed.

Notes by the Teacher:

UNIT 2
SESSION 4

It's Alive!

Session Schedule

Pre-teaching (10 minutes)

⬇

Activity Part 1 (10 min)

⬇

Break (2 min or as needed)

⬇

Activity Part 2 (20 min)

⬇

Break (2 min)

⬇

Activity Part 3 (10 min)

Pre-Teaching Topics & Terms

Topics:

Show students one or more example projects from the "It's Alive!" studio. Create a simple animation to model the animation process.

Terms:

Terms	Description and Symbol
Loops	What you do more than once.
Animation	A kind of video you watch that moves.
Sprite	What is used on the computer screen.
Costume	Are what can be worn.

Expectations:

Tell students that they are expected to animate an object using the loops.

Session Objectives

The purpose of this session is to teach students how to use the loops to create an animaiton, to show them the difference between the sprites and costumes.

Learning Objectives

By the end of this session, students will be able to:

1. Create a simple Scratch project with an object animated using loops

Resources:

¤ "It's Alive!" handout
¤ "It's Alive!" Studio at http://scratch.mit.edu/studios/475529
¤ "It's Alive!" Studio instructional video
¤ "Orange Square, Purple Circle Animated" instructional video

ACTIVITY DESCRIPTION

Activity Part 1

¤ Show students with visual, auditory, and multi-sensory learning channel preference one or more example projects from the It's Alive! studio
¤ Ask students with visual, auditory, and multi-sensory learning channel preference to watch the "It's Alive! Studio" instructional video
¤ Ask students with visual, auditory, and multi-sensory learning channel preference to watch the "Orange Square, Purple Circle Animated" instructional video
¤ Have the "It's Alive!" handout available to guide students with visual learning channel preference
¤ For students who cannot complete the process and for student with little or no formal communication system and who do not respond to the video, use 1:1 instruction with systematic prompting.

Activity Part 2

¤ Introduce the concept of an animation as looping through a series of incrementally different pictures, such as in a flipbook or a Claymation film.
¤ Encourage students who prefer working alone to explore loops by changing costumes or backdrops to create an animation and add to their "Orange Square, Purple Circle" projects.
¤ Ask USATs to help students who prefer working in groups using guided practice.
¤ For students who have little or no formal communication system, use 1:1 instruction with systematic prompting.

Activity Part 3

¤ Invite students who prefer working in groups to share their work with their peers and/or USATs. Have these students put their projects in presentation mode and invite them to walk around and explore each other's projects. Ask these students utilize the reflection prompts in presenting their projects
¤ Ask students who prefer working alone to think back on their design process by responding to the reflection prompts in their design journals in written and/or symbol format

Notes to the Teacher

- Move students who seem agitated, uncooperative, being destructive, and/or showing repetitive, idiosyncratic speech patterns, and/or inappropriate behavior to an individual workstation, a calming, or quiet area.
- Move students showing anxiety to a familiar environment to reduce their anxiety levels
- Facilitate ways to calm students down.
- Pair students who do not initiate interaction but will accept initiations from others with students who prefer studying in groups.
- Use common and familiar words in your verbal instructions for students having difficulty communicating.
- For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance.
- Collect duration data on the students who require frequent breaks.
- Collect duration data for students who need extended time to complete the tasks.
- For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance (Student names here).
- Use common and familiar words in your verbal instructions for students having difficulty communicating providing symbols or other visuals as needed.

Notes by the Teacher:

UNIT 2
SESSION 5

Debug It!

Session Schedule

Pre-teaching (10 minutes)

⬇

Activity Part 1 (5 min)

⬇

Break (2 min - As needed)

⬇

Activity Part 2 (15 min)

⬇

Break (2 min - As needed)

⬇

Activity Part 3 (15 min)

Pre-Teaching Topics & Terms

Topics:

Show students the projects on the Unit 2 Debug It! handout, and explain them the problems in the project. Show them how to solve one of these problems with one of these projects.

Terms:

Terms	Description and Symbol
Debug	Find and change problems.
Fix	Change problems to make better.
Investigate (explore)	To look at so you can understand.
Buggy (many errors)	A lot of problems.

Tinker (Try and Fix)	Try and fix.
Code (create a program)	Create a program.
Problematic (difficult)	Takes more work to do.
Solution (answer)	What is done to deal with problem.
Challenge (web activity)	Something to do.
Testing (To try more than once)	To try over and over.

Expectations:

Add projects to a Scratch studio, make a comment to a Scratch project in a Scratch studio.

Session Objectives

This session targets to teach students how to identify, investigate, and offer a solution to a problem with a Scratch project.

Learning Objectives

By the end of this session, students will be able to:

1. Identify a problem with a Scratch project.
2. Investigate a problem with a Scratch project.
3. Offer a solution to a problem with a Scratch project.

Resources:

¤   Unit 2 Debug It! handout
¤   Unit 2 Debug It! Handout instructional video
¤   Unit 2 Debug It! instructional video
¤   Unit 2 Debug It! studio at http://scratch.mit.edu/475539

ACTIVITY DESCRIPTION

Activity Part 1

- Have the Unit 2 Debug It! handout available to guide students with a pre-K reading level or higher
- Show students who struggle following the handout (student names) how to open one of the Debug It! projects, and debug the problem in the project.
- Demonstrate or have USATs demonstrate "Debug it" pairing instruction with the handout step-by-step having the student with little or no formal communication model each step.
- Have students who engage with videos (student names) watch the Unit 2 Debug It! Handout instructional video.
- Have students who engage with videos (student names) watch the Unit 2 Debug It! instructional video.

Activity Part 2

- Show students with a pre-K reading level or higher (student names) how to open each project on the Unit 2 Debut It! handout and explain them what they are expected to debug. Encourage them to click on the "Look Inside" button to investigate the buggy program, tinker with problematic code, and test possible solutions
- Ask these students (student names) to watch the Unit 2 Debug It! instructional video. \ Open each project on the "Debug it" handout for students who struggle or have little or no communication.
- Repeat: Demonstrating or have USATs demonstrate "Debug it" pairing instruction with the handout step-by-step having the student with little or no formal communication model each step.

Activity Part 3

- Give students who were successful (student names) time to test and debug each Debug It! challenge.
- Ask USATs repeat the demonstration and prompt responses of struggling for students who are struggling with or without communication problems

Activity Part 4

- Ask students who have been successful (student names) to reflect bask on their testing and debugging experiences by responding to the reflection prompts in their design journal in written or drawing format and ask who have difficulty sharing (student names) to discuss with one peer (student names) or USATs (student names).
- Discussions include AAC, showing the drawings.
- For students who cannot engage in discussions or choose not to do so, ask if they like/don't like the project. The USAT should note student names and responses.

Notes to the Teacher

- ¤ Move students who seem agitated, uncooperative, being destructive, and/or showing repetitive, idiosyncratic speech patterns, and/or inappropriate behavior to an individual workstation, a calming, or quiet area.
- ¤ Move students showing anxiety to a familiar environment to reduce their anxiety levels.
- ¤ Facilitate ways to calm students down.
- ¤ Pair students who do not initiate interaction but will accept initiations from others with students who prefer studying in groups.
- ¤ Use common and familiar words in your verbal instructions for students having difficulty communicating.
- ¤ Do not enforce a time limit for students who are having difficulty comprehending instructions and/or completing tasks
- ¤ For students with tendency to persevere on a topic, involve teacher aid/USATs for individualized assistance.
- ¤ Give frequent breaks for students, based on data collected.
- ¤ Offer extended time to students as indicated in the IEP.
- ¤ Provide positive, meaningful, and immediate feedback to students who show inappropriate behavior and/or unresponsive to reflection prompts.
- ¤ Print verbal, visual directions before transitions and changes and post them in visible areas in the classroom.

Notes by the Teacher:

UNIT 2
SESSION 6

Music Video

Session Schedule

Pre-teaching (10 minutes)

Activity Part 1 (5 min)

Break (2 min or as needed)

Activity Part 2 (15 min)

Break (2 min)

Activity Part 3 (15 min)

Topics:

Show students a few sample "Music Video" projects from the "Music Video" studio. Model students how to create a simple Music Video project.

Terms:

Terms	Description and Symbol
Music Video	A video you watch. They have music you can hear.
Animation	A kind of video you watch that moves.
Combine	To put 2 things together.

Expectations:

Explain to the students that they will be creating a Scratch project with at least one sprite containing at least one sound, which plays when an event attached to the sprite occurs.

Session Objectives

The purpose of this session is to teach students how to create a "Music Video" project in Scratch that combines music with animation, and discuss their projects/work-in-progress with their peers, USATs, and/or on their Design Journals.

Learning Objectives

By the end of this session, students will be able to:

1. Create a simple Music Video project that combines music with animation.
2. Share their Music Video projects with their peers, USATs, and/or on their Design Journal.

Resources:

- Projector
- Music Video studio
  http://scratch.mit.edu/studios/475517
- "Music Video" instructional video
- "Music Video Studio" instructional video
- "Music Video" handout

ACTIVITY DESCRIPTION

Activity Part 1

- Introduce students to the idea of the creating a music video in Scratch project that combines music with animation.
- Walk through some of the music video projects from the "Music Video" studio for students with pre-k reading level or higher (student names).
- Ask these students (student names) to watch the "Music Video Studio" instructional video for a sample project.
- Ask USATs to show a few sample music video projects from the "Music Video Studio" to struggling students (student names)
- Ask USATs to demonstrate in a step-by-step process using the systematic prompting to encourage struggling students and students with little or no formal communication system to imitate each step.

Activity Part 2

- Model creating a sample music video project for struggling student and students with little or no formal communication system
- Ask students who were successful above (student names) to watch the "Music Video" instructional video for a sample project to follow along.
- Ask USATs to demonstrate in a step-by-step process using the systematic prompting to encourage struggling students and students with little or no formal communication system to imitate each step on a 1:1 basis.

Activity Part 3

- Have students sign in to their Scratch accounts and open a new project or sign in students who cannot do so.
- Have "Music Video" handout available to provide guidance to students with a pre-k reading level or higher.
- Give students time to create a "Music Video" project that combines music and animation.
- Ask USATs to prompt struggling students.
- Ask USATs to demonstrate in a step-by-step process using the systematic prompting to encourage struggling students who do not respond to prompting alone, and students with little or no formal communication system to imitate each step on a 1:1 basis.

Activity Part 4

- Ask students who have been successful (student names) to reflect bask on their testing and debugging experiences by responding to the reflection prompts in their design journal in written or drawing format and ask who have difficulty sharing (student names) to discuss with one peer (student names) or USATs (student names).
- Discussions include AAC, showing the drawings.
- For students who cannot engage in discussions or choose not to do so, ask if they like/don't like the project. The USAT should note student names and responses.

Notes to the Teacher

- Move students who seem agitated, uncooperative, being destructive, and/or showing repetitive, idiosyncratic speech patterns, and/or inappropriate behavior to an individual workstation, a calming, or quiet area.
- Move students showing anxiety to a familiar environment to reduce their anxiety levels
- Facilitate ways to calm students down.
- Pair students who does not intitiate interaction but will accept initiations from others with students who prefer studying in groups.
- Use common and familiar words in your verbal instructions for students having difficulty communicating.
- Do not enforce a time limit for students who are having difficulty comprehending instructions and/or completing tasks.

Notes by the Teacher:

BACK COVER PAGE

Intentionally left blank.