The AAC Classroom
Creating an Educational Environment to Support Unity Users

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What is the AAC Classroom?

- An educational setting for children who use AAC and AT as their primary tools for learning and participation
- An environment that supports developing competence using AAC and AT
- A program that provides access to a modified general education curriculum with necessary accommodations
- A community that maximizes inclusion opportunities for all students
Why do we need it?

- Students need to develop mastery with tools for communication and writing.
- Students need to be active participants in the educational setting.
- Students require additional support in AAC, language and literacy development due to their unique needs.
- AAC classroom teams are most knowledgeable in developing and supporting Participation Plans for Students using AAC/AT in the general education setting.
Best Practices in the AAC Classroom

Classroom Engineering

Interactive Strategies

Technology & Materials

Instructional Strategies

Curriculum
Students are entitled by law to have:

- Access to general education curriculum
- Assistive technology equipment and services as determined by the IEP team
- Accommodations and modifications necessary to participate in a general education curriculum
- Measureable benefit from their educational program as demonstrated in appropriate and ongoing assessment
Furnishings

Horseshoe Table for large group instruction

Half-moon Table for small group instruction

Rolling Chairs for staff
More Furnishings

- Room dividers for distraction free work areas
- Pocket Charts for schedule and other visual supports
- Hi Lo Changing Table for bathroom
- Hoyer lift for transfers
Equipment & Materials

- Desktop Computers
- Multifunction Printer
- Large supply of Printer cartridges
- Printer Paper
- Laminator & Laminating sheets
Additional Hardware

ELMO Doc-Tor: Document camera and Projector Bundle Systems

Screen for Projector: Essential for projecting instructional materials

Switch interface(s): Alternative input to the desktop computer via switch

Intelliswitch: Wireless switch interface offering greater access to software
# Access to Computer Options

<table>
<thead>
<tr>
<th>Access Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellikeys</td>
<td>Provides keyboard alternative access for individuals who have difficulty using standard keyboard</td>
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<tr>
<td>Key guards for standard keyboards, made by Tap Plastics</td>
<td></td>
</tr>
<tr>
<td>Envoy/Discover Pro</td>
<td>Provides onscreen keyboard access for MAC or PC users: Can be used in combination with a Tracker</td>
</tr>
<tr>
<td>Traxsys Roller Ball</td>
<td>Mouse emulation</td>
</tr>
<tr>
<td>Traxsys Joystick</td>
<td>Mouse emulation</td>
</tr>
<tr>
<td>Big Red Switches, Jelly Beans &amp; Spec Switches</td>
<td></td>
</tr>
</tbody>
</table>
Educational Software

- Microsoft Office Student Edition
- Intellitools Classroom Suite
- Clicker 5
- D.J. Solo 6 Literacy Suite
- D.J. Start To Finish Core Content
- D.J. Start to Finish Literacy Starters
Additional Software Needs

- PASS Software
- Boardmaker with Unity Symbols
- PeRT
Internet Resources

www.bookshare.org
Register a student to receive free text materials in an electronic format. Search online for 42,000 digital books, textbooks, and other reading materials.

https://unique.n2y.com/
Teach age-appropriate material to students. Lessons are aligned to content standards and include differentiated tasks to meet every student's needs.

www.news-2-you.com
A weekly on-line newspaper for beginning readers and downloadable activities related to a given weekly topic.

www.raz-kids.com
On-line leveled books and reading quizzes program. Students listen to books read aloud with vocabulary and pronunciation support, or read without support.

www.accessiblebookcollection.org
Site provides electronic books for all grade levels. Change font and background color. Download book from web site.
Additional Internet Resources

Free Classroom Suite Activities can be downloaded, used, or modified. Over 4299 specifically for Unity Users.

http://www.aaclanguagelab.com/resources
Free language lesson plans, materials, and teaching resources available on the Prentke Romich web site.

www.learningmagicinc.com
Download setups for free to use with Classroom Suite, Clicker 5, and My Own Book Shelf. Includes media video clips

http://bridgeschool.org/transition/multimodal/index.php
Teaching and communication strategies and activities are available online along with ideas for implementing AAC/AT in the classroom.
AAC Classroom at Patterson Elementary, Fremont, CA

Engineering the Classroom for Learning and Communication
WRITING WORKSTATIONS
WRITING CENTER

AROUND AND AROUND
UNTIL HANNAH
MONTANA ENDS UP
IN THE SKY.
INDIVIDUAL WORK STATION
MORNING MEETING
SMALL GROUP INSTRUCTION
LARGE GROUP INSTRUCTION

The teacher is giving a lesson on weather. She is pointing to a whiteboard with the following text:

- Sun weather: Max
- The weather is stormy
- appliance: Max
- The weather is hot: Noon
- TV: Max
- The weather is cold, windy
- hot, snowy
- Weather: Max
COMMUNICATION GROUP
COMMUNICATION GROUP

iChat Communication Group at Fairmont Elementary
LITERACY INSTRUCTION
Low Technology used for instructionally demanding literacy activity for this student
Teacher introduces Journal activity
Student using eye gaze input on the Eco2 with EcoPoint SGD
USE OF LCD PANEL

Don Johnson Literacy Starters
Spaces are clearly defined and labeled.

Access Literature
EDUCATIONAL MATERIALS ARE LABELED AND EASILY ACCESSIBLE
CLASSROOM IS NEAT AND WELL ORGANIZED

Categorically Grouped Literature
STUDENTS CAN EASILY ACCESS MATERIALS
<table>
<thead>
<tr>
<th>Period</th>
<th>Duration</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8:12-8:59</td>
<td>Workshops</td>
</tr>
<tr>
<td>5</td>
<td>9:03-9:46</td>
<td>PE</td>
</tr>
<tr>
<td></td>
<td>Brunch</td>
<td>9:46-9:56</td>
</tr>
<tr>
<td>6</td>
<td>10:00-10:43</td>
<td>Language Arts</td>
</tr>
<tr>
<td>7</td>
<td>10:47-11:32</td>
<td>History or Art</td>
</tr>
<tr>
<td>1</td>
<td>11:36-12:19</td>
<td>Communication Group</td>
</tr>
<tr>
<td>2</td>
<td>12:19-12:49</td>
<td>Lunch</td>
</tr>
<tr>
<td></td>
<td>12:53-1:36</td>
<td>Workshops</td>
</tr>
</tbody>
</table>
Classroom Rules

- Use your words.
- Wait quietly until it is your turn.
- Listen to the person who is talking.
- Look at the person who is talking.
- Be a safe driver.
- Keep your hands to yourself.
POSTED COMMUNICATION RULES

- I’m listening.
- Listen to the person talking.
- Look at the person who is talking.
- Use your words.
- Listen to the person talking.
- Tell your friend when they do a good job.
- Wait quietly until it is YOUR turn.
Large Multi Color Coded Keys and Display Board
Science unit on the planets
INSTRUCTIONAL SUPPORTS FOR SCIENCE EXPERIMENTS

What we know and what we want to find out
DISTRACTION FREE WORK STATIONS
Icon sequences for phrases on movable display board

VISUAL SUPPORTS ARE POSTED ON DISPLAY BOARDS
BULLETIN BOARDS AS VISUAL SUPPORTS

Targeted sentence frames on classroom wall
TAKE ADVANTAGE OF ALL THE BOARD AREAS

Targeted phrases and sentence frames
CREATE BOARDS TO GO WITH INSTRUCTIONAL UNITS

Unity action words on classroom wall board
CREATE THE VISUAL SUPPORTS FOR NEEDED VOCABULARY

Unity vocabulary and phrases targeted in IEP
TARGETED PHRASES

Instructing another teacher
Unity on fireworks words on classroom display board

MAKE YOUR DISPLAYS FUN AND ENTRICING TO THE EYE
Visual supports for 45 one-hit, 45 sequenced, 60 one-hit and 60 sequenced
Vantage Lite 60-icon velcroed on felt board
PORTABILITY OF THIS DISPLAY MAKES IT EASY TO GRAB AND USE

Unity 84 icons velcroed on felt display board
Fringe vocabulary on display board
Display board to support sentence formulation
STUDENT WORK DISPLAYED THROUGHOUT THE ROOM

Jojo
My day sky has many things. I see big yellow sun. I see white cloud.

Jonah Tenter
My day sky has many things. I see a green sun. I see white beautiful rainbow. I see white fluffy cloud.

Shriya
My day sky has many things. I see a white crescent moon. I see a big yellow sun. I see white cloud that looks like moonshadow.

Tajanae Williams
My day sky has many things. I see white fluffy clouds. I see a really big yellow sun. I see beautiful black birds flying in the sky.

Jojo’s Night Sky
My night sky has many things. I see white moon. I see a green star. I see red shooting stars.

Jonah’s Night Sky
My night sky has many things. I see white blue stars. I see a big blue moon. I see beautiful shooting stars.

Aaron’s Night Sky
My night sky has many things. I see a white moon. I see yellow star. I see a shooting star.

Shriya’s Night Sky
My night sky has many things. I see bright purple stars. I see a white circle moon. I see ugly humane shooting stars.

Tajanae’s Night Sky
My night sky has many things. I see a big green moon. I see blue skysaddle.
Word wall serves as a dictionary reference for students
Single Spec Switch access to a Vanguard Plus
Classroom Staff are familiar with the basic operation of the SGD in the classroom.
Classroom staff are able to use single/multiple digitized voice recording devices appropriately to support students’ needs.

Reading the Class Letter with LSBS
Classroom staff are able to use multiple communication systems appropriately during instructional activities.

LSBS for specific vocabulary repeated in story, Use of SGD for “Can I turn the page?” and use of low tech systems for student in a stander.
Classroom Staff are able to:

- Use hardware and software applications competently
- Maintain the operation of the SGDs in the classroom
- Demonstrate familiarity with vocabulary organization on SGDs
- Program communication software on the SGD
- Set up students’ SGDs and computers for participation in instructional activities
Curriculum: What are we teaching?

- Language
- Modified General Education Curriculum
- Literacy
- Communication
How do we do it?

- Use standards-based curriculum modified to meet the language needs of the students
- Use supplementary curriculum (Unique Learning) based on the Common Core Standards
  - Each month Language Arts, Science, and Social Studies Lessons are selected
  - Visual supports for all of the lessons are generated using the PASS software for Unity users as well as the visual supports that come with the monthly units
Standards Based Curriculum: Unique Learning
Teacher is able to modify curriculum based on the standards to meet students’ needs.
Language Arts: Reading

- Teacher selects what phrase, sentence, or passage the student is responsible for reading so every student can participate.
- A vocabulary set in Language Builder is created for each student so only vocabulary necessary for reading the story is visible to the student.
- Students are encouraged to explore their vocabulary when Vocabulary Builder is turned on and prior to the start of the reading lesson.
Instructional & Interactive Strategies

- Explore Vocabulary
- Read Out Loud with Visual Supports
- Aided Language Stimulation
- Prompting with Visual Supports
- Guided Practice
- Independent Practice
Repetition as a Teaching Strategy

- Teacher reads through the story and students focus on the text.
- The second time the teacher reads the story the para-educators model with aided language stimulation using the visual supports.
- The third time the teacher reads the story students read their line or phrase using the visual supports.
Read Out Loud with Visual Supports
PROMPTING WITH VISUAL SUPPORTS
Para educator uses visual supports and ALS to model the language required for the activity.
Para educators are able to use Aided Language Stimulation appropriately with students.

Para educator uses visual supports and SGD to model the language.
What is Aided Language Stimulation?

Aided Language Stimulation is “the process of providing an aided language model to the student using AAC strategies” (Goossens’, Crain, & Elder, 1992).
Process for ALS

1. Make sure the student is attending.
2. Provide visual input at a slow pace, allowing student to see what you are pointing to and process the information.
3. Vary the amount of visual model provided based on the proficiency of the student.
4. Pair the visual model with verbal input.
Student using proximity switch to scan Eco2 with Language Builder on.
Students take turns reading.

Reading Targeted Sentences
Students read independently.
INDEPENDENT PRACTICE

Student generating language independently
More Instructional Strategies

- Students are provided as much time as they need to “read” their selected text.
- Para-educators observe (from behind) and offer support after observing the student attempting 3 times (Rule of 3).
- Students always have their visual supports available as a reference.
- Students take story and visual supports home to practice with their families.
Para-educator observes student carefully and provides support when necessary after three attempts.

Pareducator implementing the “RULE OF 3”
Para educators support students during instruction.

Para educator providing visual support to student
Prompting

• Prompting is a systematic method for assisting a student in learning or acquiring a new skill.

• Prompts are used as a support when necessary and phased out as the skill is firmly established.
Prompting Hierarchies

Use a most-to-least prompting hierarchy when learning a new skill.

After the skill is established, use a least-to-most hierarchy to allow the student to attempt the task before providing support.
Prompting Hierarchy Levels

- Independent
- Indirect (Nonverbal or Verbal)
- Direct Verbal
- Gesture
- Modeling
- Partial Physical Assistance
- Full Physical Assistance
Comprehension Strategies
More Instructional Strategies

- Para Educators are able to implement curricular modifications.
- Classroom Staff are able to support students in mainstreamed settings and maximize participation.
- Classroom staff are able to collect data on student performance.
- Para Educators maintain a low profile when supporting students during instructional or interactive activities.
Partner Interaction Strategies
Observational Skills

Observe student as he/she interacts with familiar partners (teacher, specialists)

Determine what makes it possible for the student to communicate effectively

Familiarize yourself with the vocabulary available in the AAC systems

Maintain focus on the student at all times
Validate Communication

Unaided: Gestures, Verbalizations, eye gaze, facial expressions, proxemics

Aided Low Technology (manual displays)

Aided Lite Technology (digitized recording devices)

Aided High Technology SGD
Allow them to have their own voice

Resist the urge to interpret, embellish, and talk for the child

Try not to “predict” what they are going to say

Give them an opportunity to say what they want to say in their own words
Age-Appropriate Interaction

- Regardless of the perceived level of functioning it is essential that you interact with the student at a level appropriate to his/her chronological age.
Natural Communication Style

Minimize your focus on the tools they are using to communicate.

Respond to what the student is saying and not “how” the student is saying it.
Increase Communication Opportunities

- Make statements, comments, and questions, and elicit communication and language from the student.
- Expect a response.
- Wait for a response.
- Monitor the number and quality of opportunities provided throughout the day.
Stop Talking
• Students who use AAC need more time to process what you say and to formulate a response
• Speak less and require more (Communication Participation) from the student
• Keep track of what you said, so when the student produces an utterance, you can determine if the response is related
• Refrain from dominating the speaking turn
• Do not walk away when the student is formulating a response to your statement, questions, or comment
• Wait patiently, orient toward them, and try not to “fill in” with unnecessary speech
Position yourself for face to face interaction.

Your body language conveys to the communicator that you are willing to wait, and stay focused entirely on them.
Encourage and Support Communication

Seek out opportunities for students to communicate with other adults and peers during unstructured time.
Provide opportunities for AAC Peer-to-Peer Interaction

Students are having a good time goofing around with their talkers and making animal sounds.
Make it a Priority!

- Make communication the priority and sacrifice your agenda
- Help unfamiliar partners interact appropriately with the student
- Avoid serving in the role of “interpreter”
Follow Student’s Lead

- Students will communicate about what interests them
- Let them be in control
- Help them say what THEY want to say
Talk about what they feel or think, not just about what they want.
Tools for Communication

- Don’t let the “tool” get in the way of communication
- Recognize that the student is making the most out of the system they have
- Understand that they may have to use what they have flexibly if they lack the specific vocabulary they need
- Don’t focus on their device, focus on them
Direct Feedback

- Let the student know exactly what you need clarification on when you are uncertain about what is being communicated.
- Elicit more information to assist in resolving the communication breakdown.
- Restate the “utterance” and ask student to affirm/deny the intent.
Avoid yes/no question

- Partners can take away the student’s control by asking yes/no and forced choice questions exclusively.
- Use a variety of open ended questions, comments, and statements and insist on a response (unaided or aided) from the communicator so he/she learns that there is an expectation for reciprocal interaction.
Go Slow

- Pace yourself in accordance with the communication rate of the students
- Provide ample time for the student to process and initiate a response (e.g. 20 seconds) before providing additional cues (least-most)
Slow Pace to Accommodate Processing Needs of Students

Unique Learning Unit on Health: Adolescence
Maintain Positive Attitude

- Convey a positive attitude toward the student
- Believe in their ability to learn
- Believe in their ability to communicate
- Take seriously your role as a person who enables them to communicate