Teaching Students with ADHD to F.O.C.U.S.: A Learning Strategy

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Students with attention deficit hyperactivity disorder (ADHD) make up a significant portion of the students receiving intervention in schools. Bloom and Cohen report that 4.5 million children in the United States between the ages of 3 and 17 had ADHD in 2006 (Bloom & Cohen, 2007). This disorder can have a significant impact on students’ academic success due to difficulty with selective attention, sustained attention, impulsivity, and high levels of activity. One specific characteristic which inhibits academic success is reduced ability to selectively attend in order to listen to and follow directions (Maag & Anderson, 2007; Zentall, 2005). Learning strategies are a frequently used intervention for students with ADHD (Zentall, 2005). Furthermore, learning strategies to improve listening effectiveness are supported for this population (Alberta Education, 2006).
This article focuses on teaching a learning strategy to develop improved listening in students with ADHD. The goals of this article are to briefly define learning strategies, discuss necessary aspects of listening, introduce the FOCUS strategy, explain how to teach FOCUS, and explain how to evaluate students’ use of FOCUS in class.

What is a Learning Strategy?

Learning strategies are actions taken by the student to make learning easier, faster, more self-directed, more effective, and transferrable to new situations (Oxford, 1990). Developed to help students succeed in a variety of academic areas, learning strategies often employ the use of a first-letter mnemonic used to cue students to follow strategy steps. Depending on the strategy, these steps guide students as they work on academic tasks, such as reading comprehension, paragraph writing, or test taking. Learning strategies do not teach students content. They do, however, teach students how to approach the content. Instead of teaching students multiplication facts, a learning strategy might teach students the steps necessary to solve a multiplication problem (Scott & Compton, 2007). Proven to be one of the most effective instructional techniques for students with learning problems, strategy instruction is often crucial for students’ success (Beckman, 2002; Reid & Lienemann, 2006).

What are the Elements of Listening?

The first step in developing a learning strategy for improved listening is to identify the necessary elements in listening. First, listeners display several behaviors to let their communication partners know that they are prepared to focus their attention on the message; they will be quiet, watch the speaker, look at the materials presented by the speaker, and avoid fidgeting (Owca, Pawlak, & Pronobis, 2003). Secondly, individuals must be active listeners. Being an active listener rather than a passive listener means an individual actively thinks about the information being shared rather than just passively hearing it.
Some ways in which individuals can actively think about the information include identifying the important parts, reminding themselves to focus on the message, summarizing the message, making connections to what they already know, and visualizing the message. In addition to being active listeners, individuals should be participants in the communication. Listeners can make comments, ask questions, and respond to questions (Brent & Anderson, 1993; Owca et al., 2003). These skills were used to develop the learning strategy below to improve the listening of students with ADHD.

**Developing a Learning Strategy for Listening**

Good learners are strategic, meaning that they possess a variety of ways to meet cognitive challenges. Good listeners use strategies that improve their performance when they are asked to listen. From the observations and literature described above, a learning strategy was developed to cue students into critical actions that they can take to attend to and process verbal information, commit it to memory, and communicate to the speaker that they are interested. Each step of the strategy corresponds with a specific task students should complete while engaged in improved listening. FOCUS is the mnemonic developed to outline this learning strategy. Each key word is an action verb that cues students on what to do (Figure 1).

*Figure 1. FOCUS cue card*

<table>
<thead>
<tr>
<th>Memory Device</th>
<th>Intended Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on speaker</td>
<td>F1. Eyes and mind on the speaker.</td>
</tr>
<tr>
<td>Open your mind</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>O1. Clear your mind of distracting thoughts. (Ignore distractions)</td>
<td></td>
</tr>
<tr>
<td>O2. Be ready to learn and remember.</td>
<td></td>
</tr>
<tr>
<td>O3. Set your mind on the subject.</td>
<td></td>
</tr>
<tr>
<td>O4. “Your brain is like a parachute. It only works when it’s open.”</td>
<td></td>
</tr>
<tr>
<td>O5. Think about what is being said.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connect</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C1. Try to relate what you are hearing to things that you already know and are related to the lesson.</td>
<td></td>
</tr>
<tr>
<td>C2. Create a picture in your mind of the new information.</td>
<td></td>
</tr>
<tr>
<td>Use your eyes</td>
<td>C3. Listen to other students’ related comments.</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Select</td>
<td>U1. Pay attention to the book, chalk board, worksheets, overheads, or other visual materials.</td>
</tr>
<tr>
<td></td>
<td>S1. Select the important parts so you know what to remember.</td>
</tr>
<tr>
<td></td>
<td>S2. Say the important parts to yourself in your own words.</td>
</tr>
<tr>
<td></td>
<td>S3. Ask questions to make sure you understand.</td>
</tr>
</tbody>
</table>

**Teaching “FOCUS”**

There is considerable literature that outlines the most effective method to teach learning strategies (Pressley & Woloshyn, 1995). Most experts agree that the strategy should be described to the student. This should include information about each step of the strategy and the benefits of using the strategy. If a mnemonic is used, the mnemonic should be rehearsed until
the student can recite it easily from memory. The teacher should model strategy use and provide opportunities for both guided and independent practice. The student should be taught to apply the strategy in a variety of settings. Finally, the student and teacher should evaluate and monitor strategy use (Pressley & Woloshyn, 1995).

To begin this process, the teacher should first use Figures 2 and 3 to collect pre-intervention or baseline information about the students’ listening skills. The teacher might begin by teaching a short lesson on a topic related to the curriculum. See Figure 4 for a sample mini lesson. During the lesson, a fellow teacher or teacher’s aid might observe the students and note their listening behaviors using the FOCUS observation chart (Figure 2). After the lesson the teacher should check comprehension by asking the students questions related to the lesson. Any students who exhibit difficulty with the listening behaviors or in answering questions may significantly benefit from the FOCUS instruction.

*Figure 4. Sample mini lesson*

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Today we are going to learn about penguins. Let’s listen carefully because I will be asking some questions about penguins after the lesson to see how much you can remember.

Penguins are like people because they are warm blooded. But unlike people, penguins have insulation that lets them live in extremely cold temperatures. Insulation is something that keeps things warm. Houses have insulation to keep them warm in the winter. The penguins’ insulation is several layers thick. A layer of tightly packed feathers covers the penguins’ bodies. (Show picture of penguin feathers from Internet.)
Under the feather is a thick layer of fat called blubber. Both the feathers and the blubber are insulation for the penguin. Whales and dolphins also have blubber to keep them warm, or insulated from the cold. A penguin’s insulation works so well that sometimes they get too hot. What can you do when you get hot? How do you think a penguin will cool down when it gets hot? When this happens, the penguin fluffs up their feathers to let some of the heat out.

Comprehension check:

1. What is this lesson about?
2. How are penguins like people?
3. What is insulation?
4. What is the penguins’ thick layer of fat called?
5. What can a penguin do if it gets too hot?

After baseline data has been collected, teachers should introduce the strategy to students, teaching about the importance of the strategy and what each step of FOCUS implies. Following the introduction, activities in which students verbally
rehearse the FOCUS steps can be used to help them master automatic recall of the mnemonic (Beckman, 2002). The FOCUS Cue Card (Figure 1) can be used as a visual cue at the beginning of verbal rehearsal and then removed as students improve in their ability to recall the steps. Once students are able to recite the FOCUS steps with 80% accuracy, without the cue card, the teacher can begin teaching students how to use the strategy steps in listening activities.

**Activities to Teach Use of FOCUS Steps**

Teachers can use the following activities when teaching the steps to the FOCUS strategy. Remember that each step should be described, modeled, practiced, and evaluated.

*Figure 5. Activities to teach FOCUS*

<table>
<thead>
<tr>
<th>FOCUS Step</th>
<th>Related Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F: Focus on the Speaker</strong></td>
<td>“Video Feedback”: Set up a video camera in the back of the classroom while teaching. Plan for a small distraction to occur as a story is read, such as setting a timer to tick. After the lesson, show the students the video and discuss how they did or did not remain focused on the speaker. Have the students discuss what the word focus means and describe the behaviors they exhibit when they are focused on something.</td>
</tr>
</tbody>
</table>
the listener is interested. This simple communication of listening may have a dramatic effect on the quality of interaction. Anyone who has tried to talk to a disinterested person can attest to this. Therefore, it is crucial for the student to demonstrate behaviors consistent with good listening.

**O: Open Your Mind**

Multi-tasking is a skill growing in importance and popularity. It requires individuals to think about several topics at once. Unfortunately, this positive skill can negatively impact a student’s ability to listen effectively. For this reason, it is especially important to remind students that they must clear their heads and

“What’s in Your Mind?”: Begin by asking the students to take out a piece of paper and write down or draw an image that displays what they are thinking about. Next, lead a discussion about things that might interfere with listening. The term “distracted” could be introduced here. The student may be distracted by thoughts of lunch, friendships, after school activities, or the previous academic topic, and all of these can cause students to “run out of space” in their head, much like you can run out of space on your computer storage device. Explain the
| concentrate on what is being said in order to gain information from listening. | importance of opening your mind to the current topic. |

| **C: Connect** |
| Making connections to the student's prior knowledge (including interests and experiences) is a fundamental part of scaffolding as well as the basic process of learning. This part of the process helps the student to identify what he or she already knows about the topic, compare it to what is being presented, and then modify his or her concept of the topic to match. Making connections provides "hooks" on which to hang the new information, making the new information meaningful to the student and providing motivation to learn. |
| “Who’s the Artist?”: Separate students into pairs, and give each pair the name of an unfamiliar animal (i.e. kangaroo rat, aye-aye, naked neck chicken, pygmy marmoset, Andean condor, scorpion fish, sloth, anglerfish; See Your World, 2009). Student A will describe to Student B what he or she thinks the animal looks like. Student B will draw exactly what Student A describes. Then the partners will trade roles. After each student has had a turn to draw, ask them if it was easy or difficult to follow their partners' directions. Lead this discussion to the idea that they used their prior knowledge to draw what they thought the animal may look like. Students must take what they know about the topic and combine it with or replace it by the new information (i.e., from their partners). |
Recognizing the importance of making connections and being able to do so are key steps in learning to use FOCUS.

**U: Use Your Eyes**

Using your eyes is likely a straightforward step to most teachers and clinicians reading this article. However, students may not recognize this as a valuable skill that can improve their ability to listen. Therefore, it is necessary that their attention is brought to the importance of looking at the visual aids that are available. Visual aids can be a variety of items: a page in the book, writing on the board, a poster, a worksheet, etc. Teaching students to recognize and use visual aids is important.

“Math Magic” (Hopkins, 2002): This is a quick lesson to demonstrate the importance of using your eyes when you listen. Ask all the students to get into pairs and take out a pencil, paper, and calculator (optional). Explain that they will learn a trick for calculating people’s ages (students must be at least ten years old for the math trick to work). Read the following steps to the class:

- Ask your friend to think of the first number in his or her age.
- Tell your friend to multiply that number by 5.
- Then, tell your friend to add 3 to that number.
- Next, ask your friend to double the latest number.
- Finally, ask your friend to add the second number of his or her age to the total.
- Ask your friend to tell you the number that
for this step of FOCUS.

- Now, simply subtract 6 from that number.
- Announce the answer as that person’s age!

Once the steps have been read, have the students try to complete the trick from memory. This would be difficult for any student to do without seeing the steps written out or being given one step at a time. After a minute or so, put up a Power Point slide or overhead of the steps listed in Figure 6. After students finish the calculations, ask them what they thought about the math trick and what might have made it easier. Discuss the importance of using visual aids that are available.

**S: Select**

Selecting means that the student is eliminating extraneous information to focus on what is important in the message. As

“Newspaper Ads” (Jalongo, 1991): Place the students in pairs. One student will be the product salesman, and the other will be the newspaper writer. The salesman describes the product he wants to sell, including all the pertinent information about the product. The
stated above, students with ADHD have noted deficits in selective attention, which negatively affects their ability to listen to and follow directions. Instead of trying to remember each and every word spoken by the speaker, the listener must learn how to identify and remember the important parts of the message. Trying to remember information that is unimportant can interfere with the student’s recall of the overall message.

The writer will listen to the salesman and then restate in his own words what the salesman told him. The pair will split up, with the writer writing out an ad for the product. The two will trade roles. The ads will be returned to the salespeople for them to review, and the salespeople will judge whether or not they approve printing of the ad. Discuss the fact that not all the information was included in the ads. Ask students how they decided what was important enough to be included in the ad information. Explain that identifying the important parts of a message helps them remember and focus on it.

### Strategy Practice

Students are now at the point where mini lessons can be given in a variety of content areas as opportunities for them to practice applying FOCUS. See Figure 4 for a sample mini lesson. At first, lessons should be taken from content materials one grade level lower than where students are currently performing. This is done so that the focus of the challenge is on the use of the strategy, not necessarily on the content of the lesson. As students achieve mastery of FOCUS with the lower grade...
level content materials, mini lessons at the students’ current grade level can be given to assist students in learning to apply the FOCUS strategy to material that is more challenging.

Each mini lesson for FOCUS practice should follow a set of steps. First, the teacher should review FOCUS with the students using the FOCUS Cue Card. Next, students should be told that they will be practicing using FOCUS during a lesson and that they will be asked questions afterward to see how well they listened. The FOCUS Cue Card can be displayed in the room as a visual reminder of the strategy. An advanced organizer can be given to each student as an additional visual cue for use during the mini lesson. The teacher will present the brief mini lesson while using the Observation Chart (Figure 2) to record the behaviors that are representative of good listeners and take notes for individual feedback after the lesson. Once the mini lesson has been taught, the teacher will ask the students comprehension questions for information obtained through the lesson. Each student’s accuracy on these questions will be recorded on his or her Progress Chart (Figure 3) in the “Controlled Practice” section. Once the mini lessons are taught at students’ current grade levels, the data is recorded in the “Advanced Practice” section. These two forms of evaluation are explained in greater detail in the following section. Finally, the teacher and students will discuss how they applied the strategy during the lesson: how the steps were helpful, what they noticed as they used the steps, what they did well, and where they can improve.

As more mini lessons are taught, teachers should need to provide fewer and fewer cues for students to use the strategy. Also, less explanation of the strategy and less assistance with application will be needed as students progress in their ability to effectively apply FOCUS.

**Strategy Evaluation**

As stated earlier, students’ behaviors that demonstrate listening and their responses to listening comprehension questions
should be evaluated before FOCUS is introduced. Having this baseline data will allow the teacher to show that students have experienced improvement in listening skills after learning to apply the FOCUS strategy.

Once students have practiced using the FOCUS strategy in the mini lesson format described above, their performance can be evaluated and recorded in the “Post-Test” section of the Progress Chart for comparison to the baseline data. Mini lessons like those above are used for the post-test evaluation sessions. Evaluation is completed through two methods. First, the students are observed and rated on behaviors related to the FOCUS strategy. During the lesson, each student is evaluated for: (a) eye contact with the speaker, (b) demonstration of listening by not talking to others, (c) use of correct sitting posture, (d) listening to other students’ comments, (e) use of relevant comments or questions, and (f) ability to follow directions (such as look at the board, take out your pencil, or turn to your neighbor). These behaviors can be easily rated during the lesson using the FOCUS Observation Chart (Figure 2)

*Figure 2. FOCUS observation chart.*
Secondly, comprehension questions related to the mini lesson are developed for assessment after the lesson. These questions can be given orally or in written form depending on the skills of the students. Each student’s score on the comprehension questions can be tracked to document progress using the FOCUS Progress Chart (Figure 3).

*Figure 3. FOCUS progress chart*
Student's Name: ____________________________

FOCUS Progress Chart

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* Symbol for comprehension score
△ Symbol for FOCUS observation behavioral chart score

*Before intervention
**Data from lessons with material below grade level
***Data from lessons consistent with student's grade level
****Data from lessons after practice has been completed
*****Data from lessons taught at times during intervention instruction
These two methods of evaluation should be employed for each mini lesson in pre-test, controlled practice, advanced practice, post-test, and maintenance to obtain data. The students should be able to gain 80% accuracy or above on the comprehension questions following the mini lessons and on the FOCUS behavior evaluation to demonstrate mastery at each level.

Conclusion

Students with ADHD face numerous challenges, with listening effectively being one. Listening is used in every class and in every situation throughout each school day. Students can apply the steps of the FOCUS strategy as they sit in class, go through the lunch line, complete group work, and interact with peers on the playground. Teaching students FOCUS and providing them with a variety of opportunities in which to practice effective use of the strategy can give them a tool to improve their functioning across the curriculum.

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