“Happy new year!” In September, teachers and students alike begin the school year with high expectations for a successful year with positive outcomes. How can schools ensure a great start and maintain this tide of positive energy throughout the year? This September/October issue of T/TAC Link Lines includes articles and resources to help educators start the year off strong and keep the successes coming!

Teachers can ensure a successful school year for all their students by:

- collaborating with their colleagues
- designing supportive classroom environments
- exploring learning tools for students and tools to assist teachers.

**Collaborating**

Marilyn Friend (Friend & Cook, 2007) stresses the importance of working with colleagues in inclusive settings to plan and problem-solve around student needs. Two articles in Link Lines support this recommendation. First, Standards-Based IEPs: A New Opportunity for Collaboration suggests that general and special educators should work together to design effective IEPs by combining their respective areas of expertise and following a consistent process. A Look in the Mirror: “Polishing” Inclusive Practices With Self-Reflection provides teachers with guiding questions to help them determine how inclusive they really are by identifying their strengths as well as areas that need further attention. This reflection can help teachers create supportive learning environments for all their students.

**Supportive Classrooms**

Simplicity, Harmony, and Opportunity: Strategies That Support the Mental Health of Students profiles a student with a mental health disorder who tells her story. Ideas are shared for providing opportunities for academic and non-academic interaction among students to create classroom cultures supportive of their emotional well-being. Visit websites on cooperative learning (http://www.edutopia.org/common-ground), peer tutoring (http://www.youtube.com/watch?v=__dMTZIL6JQ), and morning meetings (http://www.edutopia.org/louisville-sel-morning-meetings-video) to find strategies that foster the development of positive relationships in classroom environments. Other student stories will be highlighted in future newsletters.
Another strategy for creating supportive general education classrooms for students with disabilities is the use of assistive technology. *The Role of Technology in Educating Students With Disabilities in the Least Restrictive Environment* offers a tool to help IEP teams determine the effectiveness of supplementary aids and services in the general education environment (click following link for tool [http://education.wm.edu/centers/ttac/documents/newsletters/supplementaryaidstable.pdf](http://education.wm.edu/centers/ttac/documents/newsletters/supplementaryaidstable.pdf)). Subsequent issues of *Link Lines* will explore a variety of inexpensive electronic technologies, applications, and software that increase, maintain, or improve the functional capabilities of students with disabilities in general education classrooms.

**Learning Tools**

*Designing Interventions: The Chicken or the Egg?* advocates that students make academic gains through ongoing assessment, prioritizing student skill needs, goal-setting, and designing and implementing effective interventions. The article includes reading comprehension and decoding interventions such as Pocket Words, Spot and Dot, and Word Search that will arm your students with important reading tools.

All students need to learn how to manage digital calendars and task management systems in order to function in today’s technology-driven world. *Featured Applications: Calendars and Task Management Tools* suggests looking into Microsoft Outlook’s calendar and task management applications, Apple’s iCal application, or Google Calendar as ways to keep your students on task and organized; you may end up changing your own organizational tools as a result.

**Teaching Tools**

Finally, *Teaching Morphology: Enhancing Vocabulary Development and Reading Comprehension* reveals the results of the Virginia high-stakes assessment showing a general weakness in vocabulary development for Virginia students. This article offers tools for teaching morphology or the study of the structure of words. Students who understand how words are formed by combining prefixes, suffixes, and roots tend to have larger vocabularies and better reading comprehension (Prince, 2009). For more reading strategies, access the new Considerations Packet, *Adolescent Literacy: Evidenced Based Instructional Strategies, Why, What, and How* at [http://education.wm.edu/centers/ttac/resources/considerations/index.php](http://education.wm.edu/centers/ttac/resources/considerations/index.php).

For additional information on T/TAC W&M services and resources, access [http://education.wm.edu/centers/ttac/](http://education.wm.edu/centers/ttac/).

In the words of the philosopher and poet Kahlil Gibran, “The teacher who is indeed wise does not bid you to enter the house of his wisdom but rather leads you to the threshold of your mind.” Have a great school year!

**References**


It’s been a long day, and when you finally get home, you notice a huge, and growing puddle of water in front of your refrigerator. Your air conditioner has stopped working, and your washing machine won’t drain. Do you grab the screwdriver and wrench and get to work, or do you call someone who specializes in repairing appliances?

When it comes to appliances, the choice of calling for an expert makes much more sense (unless you know exactly what you are doing). But what happens in schools? When teachers aren’t certain about something in their classrooms, do they collaborate to plan or problem solve?

State and federal regulations require the input of at least one general education teacher at the Individualized Education Program (IEP) meeting if the child is or may be participating in the general education environment. However, general education teachers have reported low levels of satisfaction with IEP development (Hudson, Menlove, & Suter, 2001). Some of the reasons for their dissatisfaction include:

- Feeling like their input is not valued
- IEPs that don’t relate to what students are learning in their classrooms
- IEPs that don’t address what classroom teachers are teaching
- IEP goals that seem unrealistic and vague

While time constraints contribute to a lack of collaboration, there is a definite need to improve collaboration between general and special educators in creating meaningful IEPs.

Standards-based IEPs present a necessity, and a new opportunity, for collaboration within schools. Traditionally, IEPs have focused on student acquisition of basic academic, access, and/or functional skills with little relationship to specific academic areas or grade-level expectations. In contrast, the process used to develop Standards-based IEPs is directly tied to the state’s content standards. Both the description of the student’s present level of performance and at least some of the annual IEP goals are aligned with and based on the state’s grade-level standards. This creates an individualized program that is aimed at getting the student to a proficient level on the state standards (Commonwealth of Virginia Department of Education, 2011, p. 9).

Standards-based IEPs are suggested as best practice for IEP development by the Virginia Department of Education (VDOE) in response to the 2004 reauthorization of the Individuals with Disabilities Education Act and the 2007 federal assessment regulations under the Elementary and Secondary Education Act. The legislation emphasized access to the general education curriculum and addressed alternate assessments based on modified academic achievement standards. In order to participate in the alternate assessments, students’ IEPs must include IEP goals that are based on the academic content standards for the grade/ courses in which they are enrolled; and ensure that students being assessed have access to the curriculum and instruction for the grade in which they are enrolled (Commonwealth of VDOE, 2011, p. 6). The Virginia Modified Achievement Standards Test (VMAST) is an online grade level alternate assessment for a small group of students with disabilities who are expected to learn grade level content, but may need additional time and instructional and assessment supports to do so. One criterion for students who participate in VMAST is that they must have a Standards-based IEP.
The opportunity for collaboration between and among general education teachers, special education teachers, and/or content specialists exists in and around the content standards. Typically, the general education teacher is the content specialist with knowledge of the “big ideas” and critical concepts, whereas the special education teacher is considered the learning and behavioral specialist with important information and insights about students with disabilities. In order for students with disabilities to succeed in meeting the content standards, general and special education teachers must work together to determine which critical concepts (general education) need specialized instruction (general and special education) and what such specialized instruction will entail (special education). Understanding the structure of the curriculum is critical to determining which concepts will need the most support and when those concepts will be used again in the spiraling curriculum. The manner in which the student learns best is equally critical to designing effective instruction.

General and special education teachers need to draw on each other’s specializations to collaboratively write effective Standards-based IEPs. By working together, both teachers have valuable input to align the IEP with the general curriculum. Collaboratively, they can write clear goals tied to what is being taught in the general education classroom and plan how content and skills will be taught to meet student needs.

Below are some questions for general and special educators to consider when writing Standards-based IEPs:

- What does the student know and what can he/she do?
- What are the critical curricular concepts that require specialized instruction?
- What specialized instruction is most effective with the student?
- How will we know that the student is progressing and that the instruction is effective?

By working together, general and special educators can meaningfully combine their areas of expertise to help ensure students receive the instruction they need to access and master the content they are required to learn.

References


October is Disability History and Awareness Month (DHAM) in Virginia. The newly designed I'm Determined website (www.imdetermined.org) includes learning modules that can be used by adults and students who want to learn more about the topic of self-determination. The first two modules focus on DAHM (http://www.imdetermined.org/modules/). The intent of this first module is to provide information from a variety of resources about the global history of disability and how our perceptions of and attitudes toward people with disabilities have changed over the past century. The second module includes a WebQuest that explores the history of disability awareness throughout the nation. The module also highlights the efforts and achievements of Virginia’s student leaders. It explores the work of the Youth Leadership Forum, the I’m Determined Youth Summit, and the Virginia Board for People with Disabilities.
Why Reflect?
Reflection can play an important role in helping teachers improve their inclusive practices. In his book *Instructional Coaching: A Partnership Approach to Improving Instruction* (2007), Jim Knight notes that “reflection is necessary for learning since often the most important parts of skillful or artistic activities, like teaching, are hidden from our conscious understanding” (p. 48). Knight (2011) observes that reflection can occur three different ways:

- *Looking back* is thinking about something after it has happened and considering what went well and what needs to be done differently the next time. For example, “Did I provide enough opportunities for all students to respond during the lesson? What else could I do to increase the number of opportunities?”
- *Looking at* is being aware of what is going on while in the moment and making adjustments as needed. For example, “Hmm, I think I need to draw a picture to help students understand the difference between a direct and an indirect object pronoun right now. My example didn’t get the idea across like I expected it would.”
- *Looking ahead* is “thinking about how to use an idea, practice, or plan in the future” (p. 37). For example, “How can I use the recording option in our presentation software to make the lesson on integers clearer?”

Guiding Questions: How Inclusive Am I?
Teachers can use the following questions to help identify strengths and areas needing further attention.

Planning
- Do I collaborate with other teachers, related services providers, and paraprofessionals on a regular basis?
- If I am a co-teacher, do I regularly meet with my partner to plan lessons that meet the needs of our students? Do we use a variety of co-teaching methods?

Classroom Structure
- Are group and individual work areas clearly defined?
- Are classroom rules displayed?
- Is the daily schedule posted? Have I considered using color or pictures to make information more explicit?
- Are opportunities for purposeful movement built into the lesson?
- Do I use and have I taught students cues for starting work, getting materials, and quieting down?
- Is there a clear plan for transition times and do students know the plan?
- Do I help students organize their materials by using checklists, folders, or other tools?

(Adapted from Bender, 2002)
Lesson Design and Delivery

- Do I differentiate instruction by using flexible grouping, providing activities that appeal to various learning-style preferences, giving students choices, and creating alternative activities and assessments (Tomlinson, 2001)?
- Do I think “universal design” when planning instruction? Do I incorporate the three qualities of universal design when planning instruction:
  - Multiple means of representing content (e.g., visual and oral strategies);
  - Multiple means of students' expression of content (e.g., writing, illustrating, speaking); and
  - Flexible means of engagement as students learn (e.g., videos, software, and role-playing) (Center for Applied Special Technology [CAST], 2011).
- Do I provide opportunities for students to work in small groups and in pairs?
- Do I use graphic organizers to assist students with organizing information in meaningful ways? For example, Bender (2002) suggests providing students with lesson outlines as note-taking tools.
- Do I use the instructional sequence of "I do" (teacher model), "We do" (group practice), and "You do" (individual practice) (Bender)?
- Do I provide supports or scaffolds to students as they are learning new material and withdraw them when they are able to perform the task on their own (Bender)?
- Do I use active learning strategies such as "think, pair, share" to promote recall and understanding of new learning?
- Do I teach learning strategies along with content material? Strategy instruction may be defined simply as instruction in how to learn and perform (Lenz, Deshler, & Kissam, 2004). "Learning strategies help students learn and perform by providing them with a specific set of steps for: (a) approaching new and difficult tasks, (b) guiding thoughts and actions, (c) completing tasks in a timely and successful manner, and (d) thinking strategically (Lenz et al., p. 261). Learning strategies may include organizing materials, memorizing information, taking notes, reading text, and taking tests.
- Do I use ongoing informal and formal assessments to help inform instruction and monitor student progress?
- If I co-teach:
  - Do students consider both teachers as “their” teacher?
  - Are both teachers actively involved in instruction and classroom management?

Reflecting on current inclusive practices and identifying new opportunities to refine those practices can help teachers create a supportive learning environment for all students.

Where Can I Learn More?

For more information about strategies for creating inclusive environments, consult the T/TAC W&M website at http://education.wm.edu/centers/ttac/. Click on the “Resources” link to see a complete listing of helpful resources. Highlights include a link to the T/TAC William & Mary lending library where teachers can access a list of holdings, an online search engine, and ordering instructions. Library materials will be sent along with a postage-paid return mailer.
Considerations Packets, information packets that provide a brief overview of current topics and best practices for serving students with mild/moderate disabilities, may be ordered by clicking on the “Considerations Packets” link on the resources web page. For information on specific teaching practices, consult Co-Teaching, Co-Planning for Student Success, Differentiating for Success in Inclusive Classrooms, or Grading in Inclusive Classrooms.

For an in-depth article on four modes of thinking that reflective teachers use, visit http://www.ascd.org/publications/educational-leadership/feb09/vol66/num05/Fostering-Reflection.aspx.

To see video clips of teacher reflection “in action,” visit the Teaching Channel at http://www.teachingchannel.org/videos?utf8=%E2%9C%93&q=knight&commit=Submit.

For more information on universal design, access the website of the Center for Applied Special Technology (CAST), http://www.cast.org/udl.

References


Virginia Department of Education News

- **Functional Behavior Assessment Workshops**
- **Governor McDonnell Appoints Laura W. Fornash as Secretary of Education**
- **State Superintendent Says 2011 Virginia AYP Results Emphasize Need for New Federal Accountability Model**
By designing supportive classroom environments, teachers can positively impact the mental health of their students. When teachers build positive relationships with their students and provide structured opportunities for them to interact with and help one another, students learn and practice the necessary skills to develop and maintain relationships with their peers and other adults (Hornby & Atkinson, 2003; Johnson, Poliner, & Bonaiuto, 2005).

Providing well-designed opportunities for academic and non-academic interaction among students creates a classroom culture that supports the emotional well-being of all students. Allowing students to come together as a class or as part of a structured cooperative learning group creates a sense of classroom community, increases active engagement and positive student behavior, and improves student-teacher relationships (Johnson et al., 2005). Figure 1 and Table 1 provide suggestions and resources to foster healthy classrooms.

You may know a student who has mental health issues that impact his or her ability to meet the academic and social demands of the classroom. It is important to learn about the mental health conditions that children face and to understand which strategies are most helpful in providing opportunities for students to achieve academic success (Hornby & Atkinson, 2003). To learn more about a student who has a mental health disorder, listen to Emily as she describes her experiences with OCD and read about strategies that may support a student like her in the classroom.

Perhaps you have a student with a mental health diagnosis in your classroom. It is important to learn who your students are and in what ways you can help them to be successful.

Emily is a college student who served as a student mentor at the 2011 Say YES to College event at Old Dominion University in Norfolk, Virginia. In middle school, she was diagnosed as having Obsessive Compulsive Disorder (OCD). In K-12 settings, many of the behaviors related to OCD (Table 1) are praised by educators and are means by which students can achieve their academic goals (Parker & Stewart, 1994); however, when students encounter the demands of college or other postsecondary environments, they may not be prepared for the obstacles they may face. Listen to Emily’s story as she describes the challenges of meeting the expectations she had for herself while experiencing the independence of college life. Click here to listen to Emily’s story.

Table 1  Obsessive Compulsive Disorder Characteristics, Difficulties, and Supportive Strategies

<table>
<thead>
<tr>
<th>Presenting Characteristics</th>
<th>Educational/Social Difficulties</th>
<th>Classroom Strategies</th>
</tr>
</thead>
</table>
| Obsession with neatness, correctness, and being on time | • Note-taking  
• Completing assignments  
• Organization of materials | Teach structured note taking strategies to prevent students from getting “bogged down” with details  
Develop teacher-student contracts with clear benchmark and completion dates |
| Highly competitive and critical of their performance | • Dissatisfaction with academic performance  
• Difficulty building relationships with students and adults | Structure cooperative learning groups to create opportunities for interaction with others and decrease focus on themselves and their performance |
| Need for excessive control       |                                                                      |                                                                                       |
School is a place where students spend a great deal of time interacting with their peers and adults. This environment provides a rich opportunity for teachers to create experiences that foster the development of positive relationships. As seen in Figure 1 and Table 2, effective interventions for students who have mental health issues contribute to the emotional well-being of all students; therefore, teachers should invest their time in creating opportunities for students to feel like contributing and valued members of a classroom community.

References

Table 2 Classroom Resources for Supporting Students’ Mental Health

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative Learning</td>
<td><a href="http://www.edutopia.org/common-ground">http://www.edutopia.org/common-ground</a></td>
</tr>
<tr>
<td>Peer Tutoring</td>
<td><a href="http://www.youtube.com/watch?v=_dMTZIL6JQ">http://www.youtube.com/watch?v=_dMTZIL6JQ</a></td>
</tr>
</tbody>
</table>
The inclusion of students with disabilities in general education settings is a cornerstone of the Individuals with Disabilities Act (IDEA) of 2004. Federal regulations emanating from IDEA explicitly state that students with disabilities are entitled to free appropriate public education in least restrictive environments (IDEA §300.114(a)(2)(i)). Further, children may not be removed from general education environments unless “education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily” (IDEA §300.114(a)(2)(ii)). Supplementary aids and services are “… aids, services, and other supports that are provided in regular education classes, other education-related settings, and in extracurricular and nonacademic settings, to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate …”(IDEA §300.42). Failure to provide supplementary aids and services that enable students to be educated and participate in nonacademic activities with children who are nondisabled denies students with disabilities free appropriate educations (IDEA §§300.17(d) and 300.117). Clearly, strategic selection of appropriate supplementary aids and services is essential to the education of students with disabilities in general education settings.

Individualized Education Program (IEP) teams are responsible for determining the supplementary aids and services that students require in order to be able to access and progress in general education classes and other education-related, extracurricular, and non-academic settings. This responsibility calls upon IEP teams to be knowledgeable of ever-expanding lists of such supports, and it requires teams to monitor the implementation and effectiveness of the supports they have selected. Additionally, it assumes that teams will reconvene at regular intervals to replace ineffective supports with supplementary aids and services that may more effectively protect students’ access to general education environments.

Historically, many IEP teams have selected “low-tech,” inexpensive equipment, materials, supplies, and services or relied on expensive but scarce paraprofessional services to support students with disabilities in general education settings. For example, students who had difficulty writing would be given pencil grips, wide-rule paper, copies of other students’ class notes, writing assignments of reduced length, or extended time to complete written assignments and tests. As a last resort, paraprofessionals would transcribe written assignments for them. Then, if students could not “keep up,” some IEP teams moved them to more restrictive environments instead of providing additional or alternate supports, such as speech-to-text computer software, that might have enabled them to remain with their nondisabled peers. Notably, in many school divisions access to such “high-tech” supports increased when these students were placed in more restrictive environments, contrary to the very intent of IDEA.
Today, the principles of universal design for learning and the advent of inexpensive “high-tech,” user-friendly technologies, such as smart phones, electronic notebooks, and global positioning systems, make it easier than ever to provide the supplementary aids and services necessary to educate students with disabilities in inclusive settings. According to Congressional findings summarized in the Assistive Technology Act (ATA) of 2004, educational practices that embrace the principles of universal design incorporate experiences that benefit students “with the widest possible range of functional capabilities” (ATA, 2004, 3.19). As early as 1998, Congress reported that, “in these settings, technology provided to all students is sufficient to meet the inclusionary needs of students with disabilities” because supports for persons with disabilities are built in before rather than after production (ATA, 1998, 2.10). At that time, Congress acknowledged that the line of demarcation between mainstream technology and assistive technology was “becoming ever more difficult to draw” (ATA 1998, 2.7). For example, Roberto, a student with a disability that impacts his ability to read, once depended upon a paraprofessional to read print material to him. Now he listens to printed materials using the text-to-speech feature built into new computers.

Still, the distinction between mainstream and assistive technologies is significant. IDEA defines assistive technology as “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability” (§300.5). While local education agencies have great latitude relative to the selection and purchase of mainstream technologies, they must provide assistive technology devices and services that IEP teams have determined may increase, maintain, or improve the functional capabilities of children with disabilities (§300.5). In other words, sometimes mainstream technology is assistive simply because its availability is guaranteed under IDEA. For example, Angela has difficulty initiating conversation and maintaining eye contact when she is talking with someone. In the past, she has been unwilling to use paper and pencil to record her attempts to self-monitor these behaviors in social settings. Now her IEP includes provision for a smart phone app (such as IReward) that Angela uses to self-monitor these social skills. Data indicate Angela uses this self-monitoring system consistently, and, most important, her social skills have improved.

In other circumstances, mainstream technologies become assistive when they are modified or customized for use by students with disabilities. For example, in the past, Shasmin had limited success using a paper agenda booklet to address organizational skills difficulties and to record homework assignments. Now she uses an ITouch onto which the school loaded the My Homework app. As a result, Shasmin’s organizational skills have improved, and homework assignments are completed more frequently.

Finally, some students require technologies unique to their disabilities. These are technologies that simply do not provide educational benefit to students who do not have these disabilities. For example, Ashby does not speak; previously, his teachers made picture books of words that Ashby used to communicate with classmates. Now Ashby uses an electronic notepad with software that provides pictures of these words. This technology is easier for Ashby to use and saves his teachers hours of time they previously spent creating picture books of words.
The template that follows this article illustrates the process by which IEP teams may structure placement discussions prior to removing students from their least restrictive environments. The process begins when teams consider the means by which teachers provide instruction, as well as how students interact with instructional materials and demonstrate mastery of academic and functional skills and concepts. Next, IEP teams discuss the extent to which students’ disabilities negatively impact their abilities to receive, respond to, and demonstrate mastery of the curricula in general education environments. Then, teams identify supplementary aids and services that are successfully supporting students’ educations in least restrictive environments, as well as aids and services that students may require in order to remain in general education environments. A deliberate, thoughtful process such as this ensures that students have every reasonable opportunity to be educated with their non-disabled peers.

Subsequent issues of Link Lines will explore a variety of inexpensive electronic technologies, applications, and software that increase, maintain, or improve the functional capabilities of students with disabilities to enable them to remain the least restrictive environment.

Resources to Assist IEP Teams Select Appropriate Technology Supplementary Aids and Services

National Center on Accessible Instructional Materials
BBC My Web My Way
Bookshare

Click here to download table below
The classic chicken-and-egg debate plays out in classrooms as teachers determine the academic areas in which their students require immediate support. In addition, teachers must establish the relationships among their students' multiple learning needs. So, which should come first – the student’s difficulty with passage comprehension or the student’s deficit in accurate decoding? What is the relationship between comprehension and decoding skills? The first skill on which the teacher chooses to focus is critical when designing effective interventions.

When teachers correctly prioritize student skill needs, they get the “biggest bang” for their effort. For a student who struggles with reading comprehension, for example, the teacher may decide to design an intervention that targets comprehension strategies alone or to investigate what reading dimension(s) may be impacting comprehension (see Figure 1). To illustrate, Nathan, a fifth-grade student, receives low scores on reading comprehension assessments. Ms. McKenzie, his teacher, begins to investigate possible reasons for his low scores. She conducts an instructional assessment and, after analyzing the results, decides to implement an intervention that targets Nathan’s comprehension skills. His baseline data indicate that, when he summarizes a reading passage, he includes one detail, but does not include accurate character or setting information.

Ms. McKenzie sets a short-term goal for Nathan:

*In four weeks, after reading a short passage, Nathan will provide three details and accurate character and setting information about the passage.*

Ms. McKenzie and Nathan then design an intervention that requires him to:

a. Stop frequently during reading,

b. Ask himself questions about the passage, and

c. Write his answers on sticky notes (Gravois et al., 2011).
While reading, Nathan will ask himself authentic questions:

1. Where does this story take place?
2. Who is the main character?
3. Why is this character important to the story? and
4. What will happen next?

Nathan practiced this intervention daily during his reading group, and, each Friday, Ms. McKenzie and Nathan collected data and graphed his progress. After four weeks of the intervention, data indicated that Nathan’s reading comprehension had improved. He was able to retell a passage with three details and provide accurate character and setting information. Ms. McKenzie and Nathan were delighted that he had reached his short-term goal, but they decided to continue using the strategy and to write interim and long-term goals for increasing Nathan’s reading comprehension to grade-level expectations.

Ms. McKenzie noticed that Nathan was able to apply the strategy and make gains when using a short passage written at his independent reading level, which was below grade level. In a different scenario, using the same example, Ms. McKenzie hypothesized that there was a relationship between Nathan’s struggle with reading comprehension and his difficulty with decoding words. When Nathan read a passage, he stopped frequently when he came to an unknown word. He attempted to decode the word letter-by-letter but often, especially when he did not recognize sight words, he was unable to blend the sounds to read words. In this scenario, the selected intervention included word study strategies. Nathan was taught and used the Word Search Strategy. Before reading the passage, this strategy required him to:

a. Scan the passage,
b. Circle unfamiliar words, and
c. Ask the teacher or another student for help reading unknown words (Gravois et al., 2011).

He also used the Pocket Words Strategy, consisting of the following steps:

1. Write unknown words on a small index card.
2. Keep the cards in a pocket.
3. Review the words at least three times each day.
4. Repeat reviews until the words are recognized automatically.
5. Keep no more than three new words in his pocket each day.
6. Once the word is learned, replace the card with a new unknown word.
7. Repeat steps 1-6. (Gravois et al., 2011).

The third strategy implemented by Nathan and Ms. McKenzie was Spot and Dot. “The purpose of this strategy is to enhance students’ accuracy in decoding polysyllabic words by providing a metacognitive approach to breaking apart large complex words” (Gravois et al., 2011, p. 85). Spot and Dot requires the student to:

1. When a word from a passage is unfamiliar, “spot” the vowels in the word.
2. Place “dots” over the vowels.
3. Count the consonants between the vowels.
4. If there are two consonants, divide the word between the consonants and sound out the word.
5. If there is one consonant between the vowels, break the word after the first vowel to sound
For example:

```
  win/ter
  ho/tel
```

As in the first scenario, Ms. McKenzie and Nathan assessed his skills and collected data each Friday. Nathan read passages at his independent reading level and provided a summary of what he read. Although they were not implementing reading comprehension strategies, they continued to use reading comprehension as a measure of increased proficiency with word study. Nathan was able to meet his short-term goal of retelling the passage with three details and accurate character and setting information. With continuous implementation of these strategies, they were quickly able to increase the readability level of the passages used during reading group and for Friday assessments. As a result, Nathan’s comprehension and reading levels increased, and he was transferring the skills to other content-level reading material.

Regardless of which comes first – the chicken or the egg, comprehension or decoding – teachers are faced with teaching students who continue to struggle. Facilitating teaching and learning in strategic ways creates time to remediate skills while continuing to provide meaningful access to grade-level curriculum. Exploring the relationships of content dimensions and investigating what gaps contribute to student achievement outcomes provides the necessary information to design effective interventions that result in student growth.


Resource

All students need to learn how to manage digital calendars and task management systems in order to function in today’s technology-driven world. Whether they have a disability or not, students will be expected to access, edit, and manage calendars and tasks at school and in the working world. While you may still maintain a paper calendar or task management system, it is critical to develop digital calendar and task management skills in your students. Countless calendar and task management tools are available for every device imaginable. Check out a few of the tools below and start to develop your own digital skills so that you can prepare your students for the future that they face.

### Featured Calendar Applications

<table>
<thead>
<tr>
<th>Applications (Click on each to explore)</th>
<th>Features</th>
<th>Details</th>
</tr>
</thead>
</table>
| Microsoft Outlook                     | ✅ Calendar Management  
                                       | ✅ Task Management       | This application is usually built into the Microsoft Office Suite of software and is preloaded on most PCs. |
| iCal                                  | ✅ Calendar Management  
                                       | ✅ Task Management       | This application is built into Apple devices and can be synchronized online with other devices. |
| Google Calendar                       | ✅ Calendar Management       | Google Calendar is a free online calendar management tool that can be shared with multiple people and synchronized with other calendar systems. |
| Personal cell phones and digital devices | ✅ Calendar Management  
                                         | ✅ Task Management       | Personal cell phones and digital devices come with built-in calendar and task management systems. Don’t overlook these free tools that are already on the devices that most people carry. |
| Apple iTunes App Store                | ✅ Calendar Management  
                                       | ✅ Task Management       | A variety of calendar and task management apps for iDevices are available at the Apple iTunes App Store. |
| Android Market                        | ✅ Calendar Management  
                                       | ✅ Task Management       | Check out the Android Market for applications compatible with Android devices. |
Decoding and vocabulary development are pivotal to developing strong reading skills. Indeed, the National Reading Panel (National Institute of Child Health and Human Development [NICHHD], 2000) has identified them as two of the five critical components of reading instruction (phonemic awareness, decoding, fluency, vocabulary, and comprehension). Other instructional resources (e.g., ICAT Resources®) have identified decoding and vocabulary development through word recognition/meaning and word study as two of seven dimensions of reading instruction (comprehension, metacognition, language and prior knowledge, word recognition and meaning, word study, fluency, and responding). Morphology is a critical element of successful vocabulary development and accurate decoding. Awareness of morphology has been shown to be a strong indicator of and positive influence upon reading comprehension (Soifer, 2005). Subsequently, weakness in decoding and vocabulary skills is noted as a potent inhibitor to fully comprehending text.

An examination of the Virginia Standards of Learning reveals a vertical alignment of standards from kindergarten through eighth grade focusing on decoding and vocabulary development, more specifically, on morphology. The results of the Virginia high-stakes assessment indicate a weakness in vocabulary development for all Virginia students, thus suggesting a need to provide more intense vocabulary instruction with direct instruction in morphology.

What Is Morphology?

Morphology, a word of Greek origin, combines “morphē,” meaning form, and “ology,” meaning the study of. Morphing conjures mental pictures of children’s toys such as Transformers™ that transform from one form to another through the child’s manipulation of the parts. Morphology works in much the same manner, with students manipulating the parts of words to create new meanings or altered, but similar, meanings.

Morphology relates to the segmenting of words into affixes (prefixes and suffixes) and roots or base words, and the origins of words. Understanding that words connected by meaning can be connected by spelling can be critical to expanding a student’s vocabulary. Further, parts of words (affixes) can have separate meanings that can transform or morph word meaning. Finally, as shown in Table 1, the sound sequences, letter patterns, and morphemes depend, to a large extent, on word origin (Henry, 2003).
Table 1  Word Origin and Word Structure Matrix (Henry, 2003)

<table>
<thead>
<tr>
<th></th>
<th>Letter-Sound Correspondences</th>
<th>Syllables</th>
<th>Morphemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>Same as Anglo-Saxon but few vowel digraphs Use of schwa/ǝ: <em>direction, spatial, excellent</em></td>
<td>Closed: <em>spect</em> VCE: <em>scribe</em> r-controlled: <em>port, form</em></td>
<td>Affixes: <em>construction, erupting, conductor</em></td>
</tr>
<tr>
<td>Greek</td>
<td><em>ph</em> for /f/ - <em>phonograph</em> <em>ch</em> for /k/ - <em>chorus</em> <em>y</em> for /i/ - <em>sympathy</em></td>
<td>Closed: <em>graph</em> Open: <em>photo</em> Unstable digraph: <em>create</em></td>
<td>Compounds: <em>microscope, chloroplast, physiology</em></td>
</tr>
</tbody>
</table>

Understanding the meaning of prefixes, suffixes, and roots enhances the comprehension of text being read. The manipulation of affixes can impact the part of speech that a word denotes. Having this knowledge enhances text comprehension as well. Direct instruction of morphology is an effective means to help with understanding and applying word structure for decoding, spelling, and vocabulary study (Wilson, 2005). Specifically, students can be taught strategies to segment or manipulate words according to their affixes and roots. As a result, students may be able to recognize an unfamiliar word simply by identifying the affixes and the remaining base word or root (Carreker, 2005).

Textbooks and student writings in the early grades typically use words of Anglo-Saxon origin. Typically, these words are one- to two-syllable, high-frequency words (Berninger & Wolf, 2009). Textbooks and student writings in the upper grades more frequently use words of Latin and Greek origin. In addition, the number of syllables in these words increases and unique spelling patterns emerge. Therefore, the recommended instructional sequence for teaching word origins, affixes, and roots is Anglo-Saxon before Latin and Greek.

Classroom Instruction in Morphology

Prince (2009) suggested four main instructional strategies from Lesaux’s work with morphology:

- Morphology should be taught as a distinct component of a vocabulary improvement program throughout the upper elementary years.
- Morphology should be taught as a cognitive strategy to be learned. In order to break a word down into morphemes, students must complete the following four steps:
  - Recognize that they do not know the word.
  - Analyze the word for recognizable morphemes, both in the roots and suffixes.
  - Think of a possible meaning based upon the parts of the word.
  - Check the meaning of the word against the context of the reading.
- Students also need to understand the use of prefixes, suffixes, and roots, and how words get transformed.
- Students who have knowledge of Spanish can use cognates, words that share a common origin.
Multisensory Introduction of Affixes

A multisensory-guided discovery approach, as well as the use of an affix card deck, are recommended for teaching affixes. Using this approach, the teacher reads a series of derivatives that have a common trait (e.g., joyful, careful, helpful, graceful, cheerful). The students “discover” the similar sounds and then visually discover the sound-symbol correspondence. The similar sounds and letters are then identified as a prefix or suffix, and the student verbalizes these discoveries to anchor the learning.

Finally, the teacher writes the affix on a card that is added to the affix card deck that is reviewed in a systematic manner, daily, weekly, and periodically thereafter (Carreker, 2005).

Foldables (http://www.mswinston.com/fold.pdf)

Yoshimoto (2009) suggested the use of a foldable model for the study of affixes and roots. In the example shown in Figure 1, the root “port” was used as the central focus, and adjustments were made to the prefixes and suffixes added. “De-port-ment” was created in the photo model. Other arrangements that might be created by sliding the inserts to new positions include “trans-port-ation” and “im-port-ance.”

Figure 1. Foldable for teaching affixes.

Matching Games (http://www.fcrr.org/curriculum/PDF/G4-5/45VPartTwo.pdf)

A number of matching and memory games may be found on the Florida Center for Reading Research website (follow the link above). Templates are included with directions for assembly. The games include Affix Concentration - an activity that involves matching affix and meaning; Meaningful Affixes - a foldable to assemble with affixes, roots, and definitions; Word Dissect - an activity that involves discussion and discovery with partners; and Make It Meaningful - an activity that involves an affix and root meaning discovery within the context of a sentence.

Benefits of Morphology Instruction

Students who understand how words are formed by combining prefixes, suffixes, and roots tend to have larger vocabularies and better reading comprehension than peers without such knowledge and skills (Prince, 2009). Nagy (2007) proposed that the teaching morphological awareness and decoding in school may be the way to narrow the achievement gap for children whose families differ in education and income levels, and ethnic or racial backgrounds. A deep and full knowledge and understanding of vocabulary will improve outcomes for students who struggle.
References


Resources


Florida Center for Reading Research, Advanced Phonics, Morpheme Structures: http://www.fcrr.org/FAIR_Search_Tool/PDFs/4-5AP_018.pdf


T/TAC William & Mary Professional Development

2011 W&M Symposium on Professional Collaboration and Inclusive Education
October 27 & 28, 2011
Keynote Speaker (October 27)
Ron Nash, B.S. Ed., M.A.
National Presenter and Facilitator Ron Nash and Associates, Inc.

The Student as Navigator: Empowering Students to Lead Self-Determined Lives
October 11, 2011
This one-day institute focuses on the role of educators in the development of self-determination skills in students with disabilities.

2011 Leadership Series for Administrators
Preparing Effective Leaders for Special Education (PLESE)
October 18, November 15, and December 13, 2011
This three part series will provide tools, resources, and networking opportunities for school-based administrators to create a successful inclusive environment that supports students with disabilities.

Transition Planning for a Brighter Future: Designing Transition IEPs for Secondary Students with Disabilities
Three Day Training
November 1, 9, and 16, 2011
Audience: General and special education administrators, special educators, transition specialists, school counselors, and parents

Transition Practitioners’ Council
November 2, 2011
TPC provides a forum for transition practitioners and other interested stakeholders from school divisions and adult agencies to engage in professional development activities, networking opportunities, and collaborative efforts that enhance the implementation of quality transition services for secondary students with disabilities throughout Eastern Virginia.

Everyone Deserves a Brighter Future: Designing Transition IEPs for Students with Severe Disabilities
Three Day Training
November 29, December 7, and December 15, 2011
Audience: General and special education administrators, special educators, transition specialists, and parents

Location of all Events:
The College of William & Mary School of Education
Professional Development Center
301 Monticello Avenue
Williamsburg, VA 23185

Click here to visit our Professional Development website
## T/TAC Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Lori Korinek</td>
<td>(757) 221-2335</td>
<td><a href="mailto:lkorin@wm.edu">lkorin@wm.edu</a></td>
</tr>
<tr>
<td>Co-Director, Co-Director, SIM® Professional Developer</td>
<td>Sue Land</td>
<td>(757) 221-6002</td>
<td><a href="mailto:saland@wm.edu">saland@wm.edu</a></td>
</tr>
<tr>
<td>Instructional Consultation Team Specialist</td>
<td>Cathleen Buyrn</td>
<td>(757) 221-6010</td>
<td><a href="mailto:cabuyrn@wm.edu">cabuyrn@wm.edu</a></td>
</tr>
<tr>
<td>Behavior Specialist</td>
<td>Elaine Gould</td>
<td>(757) 221-6006</td>
<td><a href="mailto:egould@wm.edu">egould@wm.edu</a></td>
</tr>
<tr>
<td>Behavior Specialist</td>
<td>Butler Knight</td>
<td>(757) 221-6003</td>
<td><a href="mailto:bsknig@wm.edu">bsknig@wm.edu</a></td>
</tr>
<tr>
<td>Inclusion Specialist, SIM® Professional Developer</td>
<td>Tina Spencer</td>
<td>(757) 221-6013</td>
<td><a href="mailto:clspen@wm.edu">clspen@wm.edu</a></td>
</tr>
<tr>
<td>Reading, Inclusion Specialist, SIM® Professional Developer</td>
<td>Mary Murray Stowe</td>
<td>(757) 221-6014</td>
<td><a href="mailto:mmstowe@wm.edu">mmstowe@wm.edu</a></td>
</tr>
<tr>
<td>Instructional Consultation Team Specialist</td>
<td>Fritz Geissler</td>
<td>(757) 221-6007</td>
<td><a href="mailto:fdgeis@wm.edu">fdgeis@wm.edu</a></td>
</tr>
<tr>
<td>Transition Specialist</td>
<td>Debbie Grosser</td>
<td>(757) 221-6005</td>
<td><a href="mailto:dagro2@wm.edu">dagro2@wm.edu</a></td>
</tr>
<tr>
<td>Transition Specialist</td>
<td>Dale Pennell</td>
<td>(757) 221-6011</td>
<td><a href="mailto:dppenn@wm.edu">dppenn@wm.edu</a></td>
</tr>
<tr>
<td>Instructional Consultation Team Specialist</td>
<td>Donni Davis-Perry</td>
<td>(757) 221-6009</td>
<td><a href="mailto:ddavisperry@wm.edu">ddavisperry@wm.edu</a></td>
</tr>
<tr>
<td>Inclusion Specialist, SIM® Professional Developer</td>
<td>Lee Anne Sulzberger</td>
<td>(757) 221-6015</td>
<td><a href="mailto:lasulz@wm.edu">lasulz@wm.edu</a></td>
</tr>
</tbody>
</table>

The College of William & Mary and Old Dominion University T/TACs provide support to educators and families in Regions 2 and 3 in Eastern Virginia. W&M T/TAC is responsible for training and technical assistance for education professionals who work with students with mild to moderate disabilities (ages 5-21). ODU T/TAC is responsible for training and technical assistance for early childhood special education/primary developmental delay (through age 9) and severe disabilities. You may contact T/TAC ODU at (757) 683-4333, or 1-888-249-5529, or visit their website at [http://www.ttac.odu.edu](http://www.ttac.odu.edu).

Click here to subscribe to our emailing list and receive our Link Lines newsletter.

Training & Technical Assistance Center
The College of William & Mary
School of Education
301 Monticello Avenue
Williamsburg, VA 23185
Phone: (800) 323-4489
Fax: (757) 221-6020
[http://education.wm.edu/centers/ttac/](http://education.wm.edu/centers/ttac/)