A CHILD KNOWS BEST

news you can use

by: Kerri Kaelin & Kendra Rickard

Look at the Behavior

The Child Knows Best is the title of this continuing article, but what does it mean? It does not mean that your child knows what is best and will run the house and you should stand back; nor does it mean that your child should tell you what to do. Like the previous article, the Child Knows Best is in reference to the child's behavior. Specifically, what does the child's responding tell you about what you should do next?

In order to build a child's academic behavior (math facts, reading, spelling, writing, etc.), one must look at the behavior to make changes. It would be nice if one instructional design fit every child's needs in regards to learning. This, however, is not the case. That is why schools have developed gifted, special education, ESOL programs and the like. However, even within these specific groups, individuality exists; for example, not all kids in gifted programs respond ideally to one method. That is one reason why classmates have different grades. It is this uniqueness in learning styles that instructors of any type (teachers, parents, tutors, administrators, etc.) should consider when making educational decisions. In other words, instructors should look at the behavior of the particular child for guidance when tailoring instruction.

All too often, learning differences between children are explained internally. In other words, educators and parents look to some unseen force that exists within the child to explain deficits. She just isn't motivated; she's too easily distracted, or he's simply not driven to do well. Although you can describe a lack of desired behavior by referring to internal forces, you shouldn't stop there. Unfortunately, you cannot reach inside a child and alter his or her drive or motivation, but we can change the external things in the environment; changing things externally can lead to the changes you want to see internally. It is as simple as this: you enjoy things you

are good at; you don't enjoy things you aren't good at. So, what can parents and educators do in order to guarantee their child's success in academics? Allow each individual child's behavior on those skills to guide your instruction.

In addition to using the behavior as a guide for instruction, one should use the behavior as a guide to deciding whether the behavior is fluent or not (remember fluent behavior is portrayed as both fast and accurate behavior). For example, Mike is in 4th grade and is working on multiplication facts with 6's in school and has completed 0-5. However, he is taking 2 hours to complete his math assignment when it should be completed in half the time. By observing his behavior of homework completion, the time Mike takes to finish his math assignment serves as a red flag. A good check would be to see how well Mike performs at his multiplication facts 0-5, or see how long it takes you to finish the sheet of multiplication problems. Maybe he does not understand the concept of multiplying, and as a result, is inaccurate or extremely slow.

If Mike says "I know my multiplication facts!" but his behavior says something else, it is his behavior that one needs to pay attention to. Additionally, if he says, "I hate math anyway. It is stupid that I have to learn it," it should be an indication that something needs to change in Mike's math instruction in order to guarantee his success. Remember, if it is easy for us (i.e., we are fluent at it) then we generally don't mind doing it. Rather than washing our hands of it and accepting that Mike just won't be that great at math, we should let his performance guide changes in our instruction. It is by focusing on the behavior of the child, that a child knows best. It is a child telling you, "I know this and that", but rather it is the "knowing" portrayed by his/her behavior. For further explanation, or questions, please contact us at **childknowsbest@yahoo.com**

Editor's note:
Kerri Kaelin and Kendra Rickard MA are both doctoral students at the University of Nevada, Reno. Upon graduation, Kendra and Kerri will each have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. Both currently work at the Center for Advanced Learning, Inc. as lead Case Advisors, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates. Their academic and professional focus is in the area of Precision Teaching from, where the concepts of this continuing article are derived. Kerri is a former Wharton High School graduate, Class of 1999.

A CHILD KNOWS BEST

news you can use

by: Kendra Rickard & Kerri Kaelin

The Importance of a Good Foundation

There are many important and critical steps that go into constructing some thing from the bottom up. For example, take the construction of a home; there are several vital steps that must be taken in order to ensure a desirable product. First and foremost, a foundation, solid and unyielding, must be laid to support the impending features of the home. Essentially, the solidity of the foundation determines the solidity of the looming structure: a scantily built foundation results in a shaky configuration that is unable to adequately support all that will be built upon it. As such, the prevailing standards in construction do not support practices which produce unstable products. Unfortunately, the practice of scantily laid foundations occurs in education on a daily basis; children are rarely prepared adequately to bear the weight of the academic world on the foundation that is provided for them.

The cement foundation that is placed beneath a home is a component of that home; all of the elements of the home taken together are the composite. Academic skills are also made up of components that make up larger, more complex composite skills. Given this, it makes sense to provide children with a strong, solid foundation of which to build complex skills on. For example, in their first few years of school, children begin learning basic computation skills like adding, subtracting, multiplying and dividing. Initially, these computations involve numbers below 10. Children are taught a concept; they practice it for a few days, and then the following lessons move on to other concepts. Consequently, new concepts are introduced when the others are still a bit shaky. Said another way, children may be accurate at performing the computations but probably are not performing them fluently (i.e., automatically and without hesitation). In fact, many children may use their fingers or a number line to assist them in solving problems. So, why

is this problematic? Basic computation skills like adding, subtracting, multiplying and dividing simple numbers provide the foundation for all other mathematic operations. And, just as in the house analogy, the provision of a solid foundation consisting of fluently performed basic computation skills sets the stage for success when the foundation is built upon. In other words, time spent practicing the components of complex math operations (e.g., basic computation) makes acquiring composite skills like, geometry and algebra less difficult.

This accumulation of non-fluent, low frequency component skills is called cumulative dysfluency; it is this type of dysfluency that is generally observed. For example, when Matt was in 4th grade learning his multiplication facts, he was performing fairly well with a B average (i.e., demonstrating a reasonable accuracy without fluency). Once he was in pre-algebra, Matt struggled with his homework and made multiple errors on his test, pulling a C in the class. When Matt reached algebra, he scarcely remembered anything from pre-algebra since he spent most of his time focusing on the computation of the problem and not with the principles, theories and formulas of the challenging class. Furthermore, it took Matt twice as long to "solve for x" than the other students due to the lack of retention of Algebra concepts (composite skills) and frequency in computation (component skills).

Don't let your child/student fall into the cumulative dysfluency trap! Ensure that he/she is performing component skills at a very high frequency; therefore, when encountering a composite skill, (e.g., geometry, reading *The Odyssey*) the acquisition of those new, more complex skills is not a thorn in your student's side.

Editor's note:

Kerri Kaelin and Kendra Rickard MA are both doctoral students at the University of Nevada, Reno. Upon graduation, Kendra and Kerri will each have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. Both currently work at the Center for Advanced Learning, Inc. as lead Case Advisors, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates. Their academic and professional focus is in the area of Precision Teaching from, where the concepts of this continuing article are derived. Kerri is a former Wharton High School graduate, Class of 1999.

Rates & Info Call 907-6167

A CHILD KNOWS BEST

news you can use

by: Kerri Kaelin & Kendra Rickard M.A.

What does it mean to really know something?

The following is a common occurrence in many classrooms. Billy and Sally both get 100% on a test, yet Billy finishes his test 15 minutes earlier than Sally. Unfortunately, their identical scores do not indicate the difference between their testing experiences, nor do they indicate the time it took each to complete the task. Why did Billy go so much faster, and what does this difference in performance indicate regarding Billy and Sally's mastery of the subject matter? The answer is fluency.

To thoroughly know something is to be fluent at it. For example, after a bit of high school and college Spanish and spending some time in the country, you can be 100% accurate in the language. To say that you knew Spanish, or was fluent in the language would be a stretch. How do you know that you are not fluent at Spanish? You cannot speak it at a rapid pace, especially when distracted. You have to pause and think about the translation of a word, how the verb is conjugated, etc. You could be accurate, but sound like a robot. Therefore, it is not simply accuracy that defines whether or not you know something but speed as well. As such, the definition of fluency is accuracy plus speed.

Why would the amount of time it takes to complete a task be important when considering the completion of schoolwork? Consider this. If Sally takes so much longer to finish the test than Billy, it is safe to assume that she doesn't "grasp" the material as well as Billy? But, what exactly does it mean to grasp the material? To "grasp" is to perform quickly and without hesitation: to truly "grasp" is to be fluent. If math performance was being evaluated, it is likely that Billy was quickly able to identify the digits the problems were composed of and quickly identify the operation needed to solve the problem; however, Sally may have had to stop and think about these things, "Is that a nine or a six? What do I do if the numbers add to more than ten?" Having to stop and think about identifying digits or letters, making letter sounds or how to solve basic math problems leads to trouble for kids academically when schoolwork gets harder, especially when the harder stuff builds on those very skills. This is why fluent behavior is important when considering your child's academic behavior.

Fluent behavior is when you see someone behave without hesitation, in other words, near automatic responding. Compare the difference between the speed of your first grader's reading and your own. You are probably fluent at reading most books, while your child may be fluent at reading basic Dr. Seuss books, if that. Compare the difference between Billy and Sally; if your child has to pause, sound out words, or makes frequent mistakes, then they are not fluent at performing the task.

Reading, math, or writing, like any other behavior, has to be trained. Excellent performance of these skills also has to be trained. Like an athlete, training and practicing important skills beyond the point of accuracy alone will help those behaviors become automatic and easy to perform for your child; thus, providing a solid academic foundation on which to build for many years to come.

Key elements of training to establish fluent behavior will be in articles to follow. Additionally, an explanation of how the child knows best, the continuing title of the column, will be explained in the next issue. Stay tuned!

Editor's note:
Kerri Kaelin and Kendra Rickard M.A. are both doctoral students at the University of Nevada, Reno. Upon graduation, Kendra and Kerri will each have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. Both currently work at the Center for Advanced Learning, Inc. as lead Case Advisors, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates. Their academic and professional focus is in the area of Precision Teaching from, where the concepts of this continuing article are derived.

Kerri is a former Wharton High School graduate, Class of 1999.

A CHILD KNOWS BEST

news you can use

by: Kerri Kaelin & Kendra Rickard

Learning Outcomes

To really "know" something is to be fluent at it (i.e., responding with little or no hesitation). Fluent behavior is observed when you see an amazing musician play flawlessly with ease or when you watch a talented corner back seize a near impossible catch and dash around multiple defensive ends in order to make a touchdown. Although it may be apparent when certain behaviors are performed fluently, fluency with respect other behaviors, such as academic behaviors, may not be as obvious. However, the extent to which such obscure behaviors are fluent may be measured by checking for some desired outcomes of learning. Specifically, outcomes such as retention, endurance and application can be tested for, and the extent to which something has been learned (i.e., whether or not it is fluent) can be assessed relative to these outcomes.

The ability to remember or retain a task over an extended period of time, even if not practiced regularly, is certainly a desired outcome of learning. Following the acquisition of a behavior, a test of retention can be employed to see how well the behavior persists over time even if it was not continuously practiced. A natural example of a measure of retention occurs when school lets out for the summer. Upon returning to school the following fall, how many academic behaviors can the students still perform accurately and with ease at a rapid pace (i.e., with little hesitation)? Behaviors that are still performed accurately and occur at a pace similar to the pace before the break can be said to be retained; additionally, initial performance of that behavior was likely fluent. However, poor retention of a behavior might suggest that the behavior was not well learned to begin with. In this situation, it is doubtful that the previously learned behavior was occurring fluently; therefore, the retention of that skill after a period of no practice is hindered.

Endurance, another desired outcome of performance, is observed when one can continue to perform a task well for an extended period of time. In other words, when endurance

is observed, a person is performing a task accurately and at steady pace for periods of time that extend beyond usual training times. In sports, athletes' performances in overtime can be viewed as a measure of endurance. In academic settings, students' performances on exams can provide a measure of endurance. For example, Sammy may be able to answer 50 single digit multiplication facts in one minute. However, when an exam is given and he has 200 problems to do in 4 minutes (same ratio of problems per time), he is unable to finish within the time parameters. Just as in the sports analogy, Sammy may be able to do well for a brief period, but when asked to perform in overtime, Sammy fatigues and his performance decelerates. In both cases, performance did not endure the prolonged test.

Finally, application is another performance outcome which can be used to assess whether or not behavior is fluent. Application is the ability to apply what has been learned to novel or more multifaceted tasks. For example, Austin is learning how to read. He has been working on letter sounds and he knows these well (i.e. he can perform letter sounds accurately and without hesitation). If Austin is then able to sound out simple words or read simple words by applying his knowledge of letter sounds, then he has applied a learned component behavior to a novel composite behavior. In other words, application occurs when a tool skill is used to perform larger more complex tasks.

In conclusion, how well a behavior or a task has been learned can be assessed with respect to certain desirable outcomes. Specifically, we can determine how well something was learned by testing for the retention, endurance and application of performance on those skills. If performance falls short when it evaluated against these measures, then it suggests that the behavior wasn't learned well to begin with. Given this, to determine how well you or your child has learned something, you can test learning against these outcomes. And, if when tested, performance fails to yield these outcomes, build the accuracy and speed at which the behaviors are performed and then test again. Optimal or fluent performance is obtained when these performance outcomes are observed!

Editor's note:
Kerri Kaelin and Kendra Rickard MA are both doctoral students at the University of Nevada, Reno. Upon graduation, Kendra and Kerri will each have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. Both currently work at the Center for Advanced Learning, Inc. as lead Case Advisors, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates. Their academic and professional focus is in the area of Precision Teaching from, where the concepts of this continuing article are derived. Kerri is a former Wharton High School graduate, Class of 1999.

A CHILD KNOWS BEST

news you can use

by: Kerri Kaelin & Kendra Rickard

Motivation: Extrinsic vs. Intrinsic

A person is born into the world ready-made with certain likes and dislikes. The motivation to satisfy many of these likes is intrinsic; in other words, the aspiration for these things is not taught. Rather, a person simply has an internal desire (i.e., intrinsic motivation) to procure what is necessary to satisfy these likes. For example, people are intrinsically motivated to find food, water, safety and love and affection. However, a person is not necessarily intrinsically motivated to do all things. In some cases, additional, extrinsic (external) consequences are important for motivation. People encounter these situations every day. Most people might prefer vacation to work or sleeping in over getting up early; nevertheless, generally speaking, people work more than they vacation or sleep in. Why is this so? It is because, although vacations and sleeping in may be intrinsically motivating, the extrinsic consequences of going to work motivate people to spend more time there.

The question of intrinsic and extrinsic motivation has been considered with respect to children's academic performance. In fact, there has been some debate as to whether or not kids should be extrinsically rewarded for performing certain tasks. In other words, should parents and/or teachers provide rewarding consequences for desirable behaviors that children exhibit? Although it is common place in most families for children to earn an allowance for completing particular tasks, the same approach, when applied in school settings, is often viewed as bribery. The issue then is as follows: when a child is not performing well in academics, should external rewards be provided for something a child ought to be internally motivated to do? Poor Henry hates math. He has struggled with it for years. He still gets his 9s and 6s mixed up and now that he has to add them, he is completely confused. Math is no longer fun. How can Henry 'dig down deep inside him and find the special happy place' (i.e., find intrinsic motivation) he once had for math when he despises it? Maybe he can see realize how important it is to do well in school. However telling a second grader that doing well in math will help his chances in getting into college will not mean a thing to him as it would a high school sophomore. It is in situations like Henry's where adding external, or extrinsic, rewards will help motivate Henry and change his perspective towards math. In other words, adding extrinsic rewards will increase the intrinsic motivation (e.g., a desire to do math), which then may allow for the need of external rewards to fade out.

So, now the question remains, if external or extrinsic rewards are given, is this a form of bribery? Very few people who get out of bed in the morning and arrive to work on time consider themselves bribed to engage in these behaviors. Rather, a person goes to work and arrives on time for one reason: he/she gets paid to do so. Additionally, a person may or may not experience intrinsic motivation with respect to his/her job. A person who works in his/her preferred field with an exciting position may experience intrinsic motivation to perform that job; however, remove the extrinsic consequences (e.g., pay checks) and that person would most certainly stop going to work. Consequences, such as paychecks, are arranged in a multitude of situations to motivate behavior. In general, consequences make it more or less likely that a person will do something again. Rarely, in everyday life, are these consequences viewed as bribery. Why then should rewarding consequences, when delivered dependent on improvements in academic behaviors be considered bribery?

In summary, the rationale for identifying and delivering extrinsic motivators for academic behavior is simple. School frequently *competes* with things that are naturally intrinsically motivating for students (e.g., hanging out with friends, playing sports, watching T.V.). Add a situation like Henry's where the natural intrinsic motivations (e.g., feeling good, obtaining success) for doing well on a particular task are nonexistent and what results is a kid who would rather eat worms than do one math problem. It is here that extrinsic consequences (allowances, privileges, etc.) can be arranged such that Henry is motivated to try and do well in math versus simply give up. By adding extrinsic rewards, Henry will more likely stumble across something intrinsically motivating about math and where working for something he desires externally may no longer be necessary.

Note from the Editor:
Kerri Kaelin and Kendra Rickard MA are both doctoral students at the University of Nevada, Reno. Upon graduation, Kendra and Kerri will each have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. Both currently work at the Center for Advanced Learning, Inc. as lead Case Advisors, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates.

Rates & Info Call 907-6167

A CHILD KNOWS BEST

news you can use

by: Kendra Rickard
Behavior Specialist

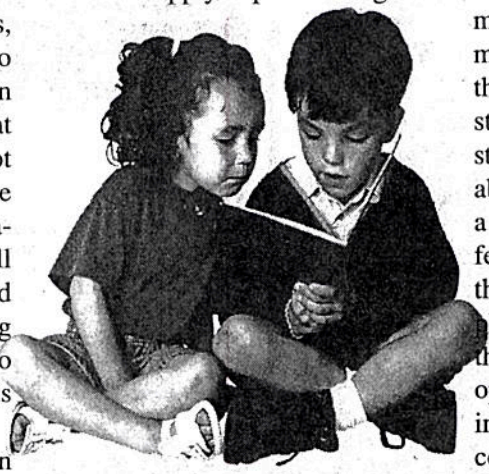
Writing As Behavior

It's interesting that expressive writing, one of the most widely used skill sets in a student's academic life is rarely, if ever explicitly taught beyond the level of the simple paragraph. Furthermore, there is still the notion that teaching students to diagram sentences, or break sentences apart into their verbal units, will somehow magically evolve into the ability to write great things. An even more frightening notion is that great writing is a talent and cannot be taught. This is simply not the case. Writing, like all other academic skills, is behavior, and like all others behaviors we have addressed throughout the course of writing these articles, it too is susceptible to environmental manipulations. This is really quite good news!

To have to resign to the notion that writing is a talent that we either have or don't have is discouraging since most of us will be required to write frequently in our lives and today's students will have to do the same. As I have already mentioned, the "train sentence diagramming and hope" approach isn't very effective for establishing proficient writing skills. So the question remains, what is the most effective way for teachers to teach the complex repertoire of composition?

Good writing instruction inevitably involves good grammar instruction, but not in the fashion traditionally utilized in the classroom. If students are spending time diagramming sentences in their English classrooms, a plea should be put forth to stop this nonsense! The research on this suggests that sentence diagramming has no impact on a student's ability to compose well - written sentences and certainly has no impact on his/her ability to write a paragraph or an essay. Rather, students need practice putting sentences *together* using a new grammar concept. They need to learn the conditions under which a particular grammar mechanic is applied, and they need to be provided with numerous opportunities to apply it. But, instruction does not end here.

Learning the conditions under which to apply a particular grammar mechanic is very important, but students also need to be able to recognize a missed opportunity to apply a grammar mechanic. In other words, students need to learn how to become good editors. Again, an editing repertoire is rarely, if ever, explicitly taught; yet students are expected to know what it is and be able to do it.



Teaching editing is a perfect opportunity for students to learn how to identify opportunities for using punctuation, including more complex and varied sentence structures, and making sure that a well-organized paragraph or essay has been constructed. This requires that teachers provide feedback to students with regard to their written products. This feedback should also be given in a particular kind of way, such that the students' editing behavior is more likely to come under the control of their own written products.

The traditional way of giving feedback is to circle the error for the student and correct his/her error within the text. A more effective way to shape this repertoire is to provide a form of rule-stated feedback. For example, if a student's grammar instruction recently covered the use of commas when listing items in a sentence, and in the student's written product, he/she missed the opportunity to apply this mechanic in his/her writing, rather than inserting the comma for the student, the teacher can state on the student's paper, "Remember the rule about commas when listing items in a sentence." Given this rule-stated feedback, the student can then read through his/her work and find the place where he/she forgot to insert the comma. Again, this provides an opportunity for the student's editing behavior to come under the control of the written product, and this is facilitated through the teacher's use of rule-stated feedback.

In summary, the most important take-home point of this article is that writing is behavior and it can be taught, shaped and enhanced through the use of effective teaching methods. There are certainly many ways in which students can learn to be proficient writers and only a few are provided here. Most importantly, writing skills must be taught, not assumed, and the progress students make or do not make with regard to their writing performance should guide the use of particular methods. Teachers have an opportunity to create a proficient writing repertoire in students by incorporating direct, effective instruction of this repertoire and all of its elements. This might be one of the most beneficial skills that a student learns during his/her academic career.

Kendra Rickard MA is doctoral students at the University of Nevada, Reno. Upon graduation, Kendra will have a Ph.D. in Psychology, specializing in Behavior Analysis. You can contact Kendra childknowsbest@yahoo.com.

A CHILD KNOWS BEST

news you can use

by: Kendra Rickard
& Kerri Kaelin
Behavior Specialists

The Benefit of Multiple Learning - Channel Approaches to Skill Building

Traditional educational approaches generally focus on dominant learning channels for a particular academic task. A learning channel refers to the form of the academic material presented and the way that the child responds to the material. For example, when engaging in an oral reading task, the academic materials are presented in a visual form, and the child makes a vocal response to the words on the page. However, during a spelling test, the academic materials (e.g., the words presented by the teacher) are presented in the auditory channel and the child responds to the presentation by writing the word. An emphasis on only the dominant learning channel may be limit the strength of the resulting repertoire. Let's consider an analogy.

If a muscle is underused, it is likely that the muscle will become weak and atrophied. This weakness can have an impact on the body as a whole. For example, a weak left leg means that the right leg and other strong muscles will have to work harder to compensate for the weakness in the left leg. If left alone and not strengthened, the weakened muscle will continue to impact the whole body. Simple behaviors such as walking will be impacted by this weakness. Although a person may still walk, he/she will have to adjust how this is accomplished. Furthermore, a person will likely be limited when performing more difficult behaviors such as running or playing basketball.

With regards to academics, an underdeveloped learning channel, like an atrophied muscle, may impact acquisition of or improvement on academic tasks. In addition, the inability to perform

an academic task in multiple learning channels may hinder a student's ability to acquire more complex, composite skills as he / she progresses through academic curriculum. However, through the use of multiple learning-channel training, a student is better prepared academically.

As mentioned before, in most educational settings, academic tasks are generally targeted in one learning channel. However, this may not be the most beneficial way of establishing or strengthening academic performance. Rather, some students may benefit from multiple learning-channel training. For instance, if a child is struggling to learn addition, which is typically presented in visual form, targeting addition facts in a tactile or auditory channel may enhance this repertoire. One way that this could be accomplished is by incorporating objects to represent the numbers in the addition problem. With regards to the auditory channel, the teacher could present the addition fact orally. Multiple learning–channel training can also be arranged by varying the form of response made by the child. In other words, rather than writing the answer to an addition fact, the child could provide the answer in an oral form. Indeed, there is quite a bit of research to support that multisensory or multiple learning–channel training is rather effective for acquiring and/ or improving academic skills.

In summary, if your student is struggling in a particular academic area, it may be beneficial to target the academic skills in various learning channels. By doing so, you are likely to increase your student's chances of obtaining fluent, long-lasting exemplary performance of academic skills. Additionally, his/her ability to build on those skills will be greatly enhanced.

Editor's note:
Kerri Kaelin and Kendra Rickard MA are both doctoral students at the University of Nevada, Reno. Upon graduation, Kendra and Kerri will each have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. Both currently work at the Center for Advanced Learning, Inc. as lead Case Advisors, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates. Their academic and professional focus is in the area of Precision Teaching from where the concepts of this continuing article are derived. Kerri is a former Wharton High School graduate, Class of 1999. You can contact Kendra or Kerri at childknowsbest@yahoo.com.

A CHILD KNOWS BEST

news you can use

by: Kerri Kaelin, MA
Behavior Specialists

Summertime Education

Summertime is not just a classic song of the 1990's by DJ Jazzy Jeff and the Fresh Prince. It is also a great opportunity for students who are slightly behind their peers academically to catch up with the rest of the group. Although the song suggests that summer is a "time to sit back and unwind," I'm suggesting that you take an alternative route.

While students have exponentially more time to relax and play in the sun, take an hour a day for your student to fine tune those academic skills that he/she appeared to be a bit dysfluent at during last school year. Refer back to previous Child Knows Best articles to create your own at-home tutoring hour. Remember to set high standards that include 100% accuracy with a speed component. If your student is saying answers to math facts, you want 80 correct facts in a minute; if your student is orally reading passages, you want around 120 words read in a minute.

However, free time does not magically appear in the summer for adults in the same manner as it does for students. Therefore, as a parent, you may not have time to create, operate, and effectively evaluate a tutoring program for your student. So, you may be in the market to find some outside services for your student. Here are two tips to keep in mind while you are shopping: 1) Do not settle for cookbook approaches and 2) More of the same does not often fix the problem.

A cookbook approach is when one method attempts to serve different types of learners. Although the principles of behavior are standard across learners, each student has his/her own idiosyncrasies and speed of acquisition. Therefore, not all curriculum sequences or levels within curricula are appropriate for every student. Make sure that you select a tutoring agency that is sensitive to the learning style and pace of your student. You want the program to be "self-paced" and "individually designed" to fit the needs of your student instead of trying to force your student's learning to fit to the curriculum.

When your student is struggling, requiring them do more of the same thing that they are struggling with does not work. Albert Einstein defined insanity as "doing the same thing over and over again and expecting different results." Therefore, if your student struggles with math facts, having them practice math facts repeatedly in the same previous fashion that resulted with dysfluency is not ideal. Just as a marathon runner will try to quicken his/her running time by doing interval training and other component building techniques as opposed to just running more marathons, academics require tool skill training. However, assigning more of the same is a common technique used by traditional educators. Students who are falling behind are assigned more homework. Therefore, instead of completing only the odd number of math problems, the student is told to complete all problems within the section. Again, if the student does not understand the concept on the first problem, rest assured that they will not understand the concept on the 35th problem. Furthermore, if the student is continuously responding inaccurately to one type of question, assigning more practice only results in the student continually practicing the incorrect response. Now, not only does the student has to still learn the correct response, he/she has to un-learn this more established incorrect response.

Therefore, when searching for an ideal program to serve as a booster for your student throughout the lazy days of summer, make sure that it is tailored to fit the specific needs of your student and targets these needs in a creative, yet effective (via evidence-based practices) method. So, while the rest of the crowd is selling lemonade on the corner, your student is taking advantage of the summer to prepare him/herself for the upcoming school year. This proactive step will result in less time to complete homework assignments and to study for tests throughout the school year, freeing up your student's schedule to engage in extra-curricular activities.

You may contact the author for references (childknowsbest@yahoo.com).

Editor's note:
Kerri Kaelin MA is doctoral student at the University of Nevada, Reno. Upon graduation, Kerri will have a Ph.D. in Psychology, specializing in Behavior Analysis, which is the science of learning. She currently works at the Center for Advanced Learning, Inc. as lead Case Advisor, supervising a cumulative of 30 students, grades ranging from Kindergarten to high school graduates. Her academic and professional focus is in the area of Precision Teaching from where the concepts of this continuing article are derived. Kerri is a former Wharton High School graduate, Class of 1999. You can contact Kerri at childknowsbest@yahoo.com.